3 vols

THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA
LOS ANGELES

CAT
56/5

£75
5 vols
264 / NRmx / 21 plus

THE CASTELLATED AND DOMESTIC ARCHITECTURE OF SCOTLAND

FROM

THE TWELFTH TO THE EIGHTEENTH CENTURY

Edinburgh: Printed by Thomas and Archibald Constable

FOR

DAVID DOUGLAS.

LONDON . . . . . HAMILTON, ADAMS, AND CO.

CAMBRIDGE . . . . . MACMILLAN AND BOWES.

GLASGOW . . . . . JAMES MACLEHOSE AND SONS.

Alexander Ross
Runfoord

THE

CASTELLATED AND DOMESTIC

ARCHITECTURE

OF SCOTLAND

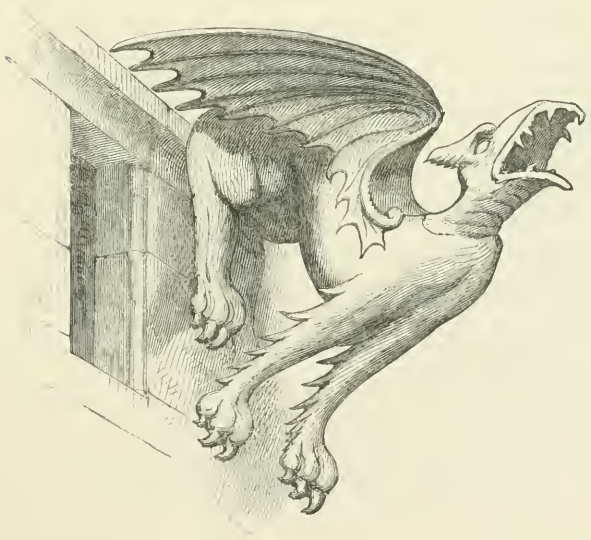
FROM THE TWELFTH TO THE EIGHTEENTH CENTURY

BY

DAVID MACGIBBON AND THOMAS ROSS

ARCHITECTS

VOLUME ONE



EDINBURGH: DAVID DOUGLAS

MDCCCLXXXVII

All rights reserved.

Art
Library
*NA
97a
M17c
v.1

PREFACE.

A NUMBER of the sketches and plans which form the illustrations in the following pages were exhibited a few years ago in connection with papers on "Scottish Castles and Houses," read before the Edinburgh Architectural Association, when the attention they received suggested the idea of the present work.

No book has hitherto been published which deals systematically with the history of Scottish Castellated and Domestic Architecture. The late Mr. Billings' valuable work on the *Baronial and Ecclesiastical Antiquities of Scotland* is an important contribution, and his beautiful drawings are a charming record of the edifices he illustrates. Mr. Billings has also the merit of being amongst the very first to recognise and draw attention to the importance of our Scottish Domestic Architecture. But the absence of plans is a serious drawback, and the descriptions of the buildings, although full of interesting matter, do not deal in a systematic manner with the history of our Architecture, especially with the domestic portion of it.

Mr. Fergusson has also touched slightly, in his *History of Architecture*, on the subject of Scottish Domestic

1299889

Architecture, but so slightly that it is evident he has not regarded it as an important element in the general history of the art.

The following pages, however, show that Scotland contains a most complete and almost unexplored series of domestic structures, exhibiting as well the gradual progress of Architecture from an early and rude epoch to more modern and refined times, as the growth of our national life and manners.

In dealing with this important series of buildings our chief object has been to trace the development of the Architecture, and to determine the stages of progress or "Periods" into which it naturally divides itself.

In order to render the historic sequence clear and distinct, and also to follow the steps by which the designs of one period passed into those of the period that followed, it is essential that the plans of the buildings be fully taken into account. We have therefore devoted much care to the accurate representation of these important elements in the design.

Our sketches are not intended to imitate or rival the beautiful and artistic etchings of some of our Scottish edifices which have from time to time been published, but simply to represent the ARCHITECTURE in what appeared to us the most intelligible and effective manner.

It is of great moment, in an inquiry like the present, that the history and development of the Architecture, as disclosed by the buildings, should be corroborated as far as possible by written evidence. We have

accordingly endeavoured to trace and collect such of the written records of the erection or alteration of the structures as were available. But we do not pretend to have discovered any new information connected with the history of Scottish Architecture, save such as can be gathered from the internal evidence of the edifices themselves.

One important result of the present inquiry is to bring into prominence the fact that Scotland, like every other country in Europe during the period from the thirteenth to the sixteenth century, possessed a Castellated or Domestic Architecture of its own, and that even in the seventeenth century, when almost everywhere else the Renaissance style reigned supreme, the native style still flourished.

It may be thought that the number of buildings illustrated is unnecessarily large. But it is, after all, only a small portion of the still surviving examples of Scottish Domestic Architecture, and there is really almost no repetition. In most of the keeps and towers there is doubtless a great similarity in general design, but it will be found that each furnishes some points of variety which give to it a special interest.

It is greatly to be regretted that most of our ancient edifices are rapidly passing away, either from natural decay or other destructive causes. Even since our sketches were made, many have disappeared either in whole or in part. The neglect with which they are generally treated probably arises, to some extent, from their bearing on the architectural and national history of Scotland not being

sufficiently understood and appreciated. We are not without hope that this work may serve to direct the attention of proprietors and others to the value of our ancient domestic remains, and may thus help to preserve some of them from the decay and demolition which at present threaten speedily to overtake the greater number. Such a result would be most gratifying, not only to us, but to every one interested in our national history.

We would take this opportunity of gratefully thanking all those who have interested themselves in the present work, some of whom have kindly contributed drawings for our assistance.

To Mr. John Bryce, Architect, Edinburgh, our thanks are due for the free and ready access he has given us to the plans of ancient buildings made by his uncle, the late David Bryce, R.S.A., when, in the course of his professional practice, he was called on to consider how to alter or add to them. Of these drawings we have availed ourselves of some of those of Drum Castle and Earl Patrick's Palace, Kirkwall, to which we have referred more fully in the text. To Dr. Skene, Historiographer for Scotland, we are specially obliged for placing at our disposal the voluminous MS. work by his father, the late Mr. Skene of Rubislaw, on the Domestic Architecture of Scotland. This work is peculiarly valuable from its containing numerous plans and views of castles which no longer exist. From it we have obtained the plans of Castle Fraser, which were not otherwise available, and views of the extremely picturesque Castle

of Cluny, now no more, together with some remarkable information regarding "lugs" and places of concealment. We are also indebted to the Earl of Cawdor for the use of plans of Cawdor Castle; to the Hon. H. C. Maxwell Stuart for the use of plans of Traquair House, and for information regarding its history; to the Hon. Mrs. Henderson of Fordell for particulars connected with Fordell Castle; to James Lorimer, Esq., LL.D., Professor of Public Law in the University of Edinburgh, for information in connection with Kellie Castle; to J. Russell Mackenzie, Esq., Architect, Aberdeen, and Messrs. C. & P. H. Chalmers, Solicitors, Aberdeen, for the use of plans and elevations of Fyvie Castle; to David Douglas. Esq., for permission to reproduce a drawing of Burgie Castle, from the unpublished series of views in Scotland of John Claude Nattes; to Messrs. Wardrop & Anderson, Architects, for the plans and elevations of Udny Castle (now much altered); to Mr. H. J. Blanc, Architect, for drawings of St. Margaret's Chapel in Edinburgh Castle; to Mr. Robert Murray for the plans of Neidpath Castle, and others not yet published; to Lord Napier and Ettrick for useful suggestions on Stirling Castle; to Mr. R. Bruce Armstrong for notes on Hermitage Castle; to Dr. Dickson, of the Register House; James T. Clark, Esq., Librarian of the Advocates' Library; and many architectural friends for their aid and encouragement in our labours.

We would also take this opportunity of acknowledging the cordial and generous reception we have almost invariably received from the proprietors and occupants of

the houses we have visited in pursuit of our subject, and the free permission which has (with very few exceptions) been accorded to us to make such measurements and drawings as we required.

DAVID MACGIBBON.
THOMAS ROSS.

92 George Street, Edinburgh,
October 1886.

CONTENTS OF VOLUME I.

INTRODUCTION.

Object of the work—Hitherto no systematic treatise on the subject—Mediæval Domestic Architecture traced from place of birth—Influence of Romans on Architecture in Gaul—Works of the Visigoths—Examples of Roman influence—Fortresses of the Norsemen—Earthen mounds gradually converted into stone walls—Norman keeps—Roman influence in England—Norman keeps in England and North of France described—Examples—Châteaux d'Arques—de Beaugency—de Loches—Colchester Castle—Newcastle—Castle Hedingham—Rochester Castle—Dover Castle—Mont du Chevalier, Cannes—Shell keeps—Château de Gisors—Norman castle garth—Erection of halls and other buildings in the courtyard—Oakham—Town houses—Iron-work—Walls painted—Effect of Crusades—Modification of keep plan—Château d'Étampes—Château Gaillard—Château de Provins—Conisborough Castle—Round towers and keeps introduced—Château de Loches—Walls of enceinte—Walls of Aigues Mortes—Château de St. André—Gateway—Tour du Pont—Thirteenth-century donjons—Château de Roche Guyon—Château de Coucy—Wooden hoards—Tower of Jeanne d'Arc—The use of wood in defences traced—Vaulting introduced in every floor—Other improvements—English castles more domestic than French, and the keep abandoned—Edwardian castles—Carnarvon Castle—Pevensey Castle—Manor-houses—Charney, Stokesay, etc.—Fourteenth century—Advance in attack and defence of castles—Isolated defences abandoned—Castle all united under one command—Donjon made in form of a large dwelling—Towers heightened and more tiers of defences added—Buildings in courtyard improved—Château de Pierrefonds—English castles developed—Interior comfort and convenience—Warwick Castle—Bodiam Castle—Manor-

PAGE

houses—Cannons in general use, 1450—Attempts to adapt old castles to use of, and to resist, artillery found unavailing—This and influence of Italian villas make revolution in architecture of castles—Introduction of Renaissance in fifteenth century—Many old features long retained—Château de Chambord an imitation of a mediæval castle—Many examples in the Loire country—Château de Montsabert—House of Francis I.—Details—Effects of gunpowder in England—Hurstmonceaux Castle—Imitation of castellated features—Pele towers of the Borders—Manor-houses—Private dining-rooms and numerous other rooms introduced—Decoration of interiors—Bow windows, fireplaces, etc.—Elizabethan style, ... 1–60

FIRST PERIOD—1200-1300.

Scottish style similar to that of England and France—Few early examples—These earthen mounds and mottes—The Broch —Connection of the latter with Scottish Architecture—Influx of Normans — No Norman keeps in Scotland — but imitations of them at later date — Castles built by Alexander I. and David I.—Prosperity of thirteenth century—Many castles erected—List of these—Scottish thirteenth-century castles described — Sites — Imitations of castles of the period in France and England—Some exceptions, . . 61

Descriptions of the following examples:—

Castle Roy, . . .	Inverness-shire, . . .	65
Kinclaven Castle, . .	Perthshire, ...	67
Lochindorb Castle, . .	Elginshire, ...	70
Loch-an-Eilan Castle, . .	Inverness-shire, . . .	73
Inverlochy Castle, . .	Do., ...	73
Lochmaben Castle, . .	Dumfriesshire, . . .	78
Rothesay Castle, . . .	Buteshire, ...	80
Dunstaffnage Castle, . .	Argyllshire, ...	85
Bothwell Castle, . . .	Lanarkshire, ...	93
Kildrummie Castle, . .	Aberdeenshire, . . .	108
Dirleton Castle, . . .	Haddingtonshire, . . .	114
Yester Castle, . . .	Do., ...	116
Hailes Castle, . . .	Do., ...	122
Caerlaverock Castle, . .	Dumfriesshire, . . .	127
Tarbert Castle, . . .	Argyllshire, ...	136

SECOND PERIOD—1300–1400.

PAGE

Complete change in style of castles after War of Independence —Country exhausted—Bruce's policy—A strong tower all that was required for a residence—The Norman keep formed the model—Fourteenth-century towers described—Found too limited—Accommodation increased by adding a wing, forming the L plan—Difficulty of fixing date—Courtyards—Buildings erected round walls at late date—Mode of development of plans of Scottish castles, ... 143

Descriptions of the following examples:—

1st, *Simple Towers*—

Lochleven Castle, . . Kinross-shire, . . . 146
Drum Castle, . . . Aberdeenshire, . . . 150
Alloa Tower, . . . Clackmannanshire, . . 155
Hallforest, ... Aberdeenshire, . . . 157
Threave Castle, . . . Kirkcudbrightshire, . . 157
Dundonald Castle, . . Ayrshire, ... 167
Torthorwald Castle, . . Drumfriesshire, . . . 175
Clackmannan Tower, . . Clackmannanshire, . . 178
Neidpath Castle, . . . Peeblesshire, . . . 183

2d, *Keeps extended into Courtyards*—

Craigmillar Castle, . . Midlothian, ... 189
Castle Campbell, . . . Clackmannanshire, . . 202
Crichton Castle, . . . Midlothian, ... 209

Comparison of Scottish castles of this period with those of France and England—The keep plan universal in Scotland, . . 221

THIRD PERIOD—1400–1542.

About 1400 a few castles built on courtyard plan—During reigns of the five Jameses large castles all on this plan—Keeps retained, but of larger dimensions than those of Second Period, as in France—Courtyard plan described—Defensive features gradually become more domestic—Old keep plan also still retained, and some keeps converted into castles surrounding a courtyard—Keep plans similar to those of Second Period—L plan becomes common, with tower in re-entering angle—Abundance of wall chambers—The pit or prison—The defences described—Parapets and bartizans

PAGE

roofed-in in late examples—Introduction of artillery—Great port-holes for guns—Interior ornament—The chapel—Exceptional examples—The order in which the castles are described, ... 222

I. Simple Keeps:—

Liberton Tower, . . . Midlothian, ... 226
Mearns Tower, . . . Renfrewshire, . . . 230
Elphinstone Castle, . . Haddingtonshire, . . . 233
Comlongan Castle, . . Dumfriesshire, . . . 237
Cardoness Castle, . . . Kirkcudbrightshire, . . 243
Newark Castle, . . . Selkirkshire, ... 247
Affleck or Auchenleck Castle, Forfarshire, ... 250
Craignethan Castle, . . Lanarkshire, ... 255
Sauchie Tower, . . . Clackmannanshire, . . 265
Kinnaird Tower, . . . Perthshire, ... 270
Burleigh Castle, . . . Kinross-shire, . . . 275
Duffus Castle, . . . Elginshire, ... 279
Redeastle, ... Forfarshire, ... 280
Dunolly Castle, . . . Argyllshire, ... 281
Benholme Tower, . . . Kincardineshire, . . . 284
Drummond Castle, . . Perthshire, ... 285
Rosyth Castle, . . . Fifeshire, ... 289
Leven Castle, . . . Renfrewshire, . . . 295
Inverkip Castle, . . . Do., ... 296
Craigneil Castle, . . . Ayrshire, ... 297
Kilkerran Castle, . . . Do., ... 298
Whittingham Tower, . . Haddingtonshire, . . . 300
Balquhain Castle, . . . Aberdeenshire, . . . 303
Darnaway Castle, . . . Elginshire, ... 304
Badenheath Castle, . . Dumbartonshire, . . . 307
Cairnbulg Castle, . . . Aberdeenshire, . . . 309
Farme Castle, . . . Lanarkshire, . . . 313

II. Keeps with One or Two Wings:—

Auchindoun Castle, . . Banffshire, ... 314
Preston Tower, . . . Haddingtonshire, . . . 317
Castle Huntly, . . . Perthshire, ... 320
Gight, or Formantine Castle, Aberdeenshire, . . . 322
Niddrie Castle, . . . Linlithgowshire, . . . 324
Craig Castle, . . . Aberdeenshire, . . . 326
Dundas Castle, . . . Linlithgowshire, . . . 328
Balvaird Castle, . . . Fifeshire, ... 335
Borthwick Castle, . . Midlothian, ... 344

Avondale Castle, . . . Lanarkshire, ... 352
Struthers Castle, . . . Fifeshire, ... 353
Stoneypath Tower, . . Haddingtonshire, . . . 355
Federate Castle, . . . Aberdeenshire, . . . 357

III. Keeps enlarged in various ways by Additions—
1st, *Keeps enlarged into Castles surrounding a Courtyard*—
Edzell Castle, . . . Forfarshire, ... 359
Rosslyn Castle, . . . Midlothian, ... 366
Balgonie Castle, . . . Fifeshire, ... 377
Kilchurn Castle, . . . Argyllshire, ... 382
Kilravock Castle, . . . Nairnshire, ... 384
Balveny Castle, . . . Banffshire, ... 386
Kilbirnie Castle, . . . Ayrshire, ... 390
Ruthven Castle, or Huntingtower, Perthshire, . . . 395
Dean Castle, Kilmarnock, . Ayrshire, ... 401
Falside Castle, . . . Haddingtonshire, . . . 409
Haining, or Almond Castle, . Linlithgowshire, . . . 413
Sanquhar Castle, . . . Dumfriesshire, . . . 415

2d, *Castles designed as buildings surrounding a Courtyard*—
These characteristic of the Third Period—Royal palaces and important castles built on this model—Later examples contain enlarged accommodation and ornament similar to foreign castles of the period—Fine designs—Domestic more prominent than Ecclesiastical architecture — Description of the following, viz.—
Doune Castle, . . . Perthshire, ... 418
Tantallon Castle, . . . Haddingtonshire, . . . 429
Dirleton Castle, . . . Do., ... 435
Spynie Palace, . . . Elginshire, ... 439
Edinburgh Castle, . . Edinburgh, ... 445
Stirling Castle, . . . Stirlingshire, . . . 464
Linlithgow Palace, . . Linlithgowshire, . . . 478
Falkland Palace, . . . Fifeshire, ... 501
House of the Knights Hospitallers, Linlithgow, . . . 508
Dunfermline Palace, . . Fifeshire, ... 514
Bishop's Palace, Kirkwall, . Orkney, ... 519

Third Period—Exceptional modifications of the Keep Plan—Examples described, viz.—
Hermitage Castle, . . Roxburghshire, . . . 523
Crookston Castle, . . Renfrewshire, . . . 533
Ravenscraig Castle, . . Fifeshire, ... 538
Morton Castle, . . . Dumfriesshire, . . . 545

PAGE

Tullyallan Castle, . . . Perthshire, ... 550
Rait Castle, ... Nairnshire, ... 558
Arbroath Abbey, . . . Forfarshire, ... 561

Example illustrative of all changes of Domestic Architecture from fifteenth to seventeenth century viz.—
Dunnottar Castle, . . Kincardineshire, . . . 562

INDEX, ... 577

THE CASTELLATED AND DOMESTIC ARCHITECTURE OF SCOTLAND

FROM THE TWELFTH TO THE EIGHTEENTH CENTURY.

INTRODUCTION.

The object of this treatise is to endeavour to trace the historical sequence of the various phases of Architecture which have prevailed in the old castles and houses of Scotland, and to try to define and explain the different styles of building adopted at different periods from the twelfth century till the revival of classic architecture in modern times. The various styles of our ecclesiastical architecture have been well ascertained, and their distinctive features defined, and every one knows how much additional interest is given to the study of our old churches by a knowledge of the history of their architecture. On visiting an ancient church, one not only admires its beauties, but naturally and at once assigns it to one or other of the Gothic periods, and marks wherein its details resemble or differ from those of other contemporary examples. An infinite variety of interest is thus imported into every portion of the building, into every ornament and every moulding.

Although many excellent and well-known illustrations of our baronial and domestic architecture have been published, there is no systematic treatise on their architectural history. It is scarcely even recognised that the architecture of our castles and houses has a definite historical sequence. The interest of these buildings would therefore be very largely increased if their various styles and epochs, with the characteristics of each, can be distinctly defined. One would then know what points to specially examine, and what to look for, in order to be able to place each building, or portion of a building, in its appropriate niche, and to compare the various examples with each other, and with the corresponding buildings of other countries. Besides, nothing can be more interesting and instructive than to follow the records of our national history contained in these old castles, and to note the manners and customs of our ancestors at different epochs as reflected in them.

The architectural history of Scotland does not date from a very remote period. The Roman occupation of the country was partial and of short duration, and left behind few or no buildings which might serve as models for the native inhabitants. Nor had the inhabitants been long enough under Roman rule to have acquired the art of imitating Roman skill and workmanship.

It was not till the returning tide of civilisation had reached Scotland from the South, in the tenth and eleventh centuries, bringing with it the revived arts, especially that of Architecture, that we find any traces of the building art in this country. It is therefore desirable, before entering on the consideration of Scotch Architecture, to trace shortly the rise and progress of the castellated and domestic architecture of the middle ages in the places of its birth, and thereafter to mark the steps by which it was gradually introduced from other countries into Scotland.[1] We will therefore first consider shortly the rise and progress of the mediæval civil and military architecture of France and England.

When the Romans retired from Gaul, during the fourth and fifth centuries, they left in that country many structures indicative of their capacity as builders and engineers, as well as numerous examples of their style of decorative architecture. The remains of the amphitheatres, aqueducts, gateways, and other works still existing in the centre and south of France, serve to show the size and extent of the edifices erected by the Romans in this part of their dominions. Although the number of the Roman buildings still surviving is comparatively small, there can be no doubt that at the time of the various invasions of the Goths and Franks the country was to a large extent covered with towns, villages, country houses, and castles, all built on the Roman model. Up to the tenth century the old Roman buildings continued in many cases to be occupied, while others were built in imitation of them, although in certain districts modifications were introduced by the Franks and other foreign invaders. As the Romans gradually withdrew their troops, they built several chains of castles and forts for the defence of the provinces they still retained. These are supposed to have served as models for the earliest of the mediæval towers. Although the northern races who invaded France used earthen mounds, and ditches with wooden superstructures, as their defensive works, still the Roman standing camp, with its ditch and mound, probably also contributed to the design of the earthworks which formed the principal defences of the earlier fortresses of the middle ages.

In the south of Gaul the Visigoths were the successors of the

[1] In the following summary the authors have freely availed themselves of the interesting works of Viollet-le-Duc and De Caumont on the Architecture of France, and of the equally interesting and very careful and comprehensive volumes of G. T. Clark and John Henry Parker on the Castles and Domestic Architecture of England.

Romans. They became amalgamated with the inhabitants, and continued much of the civilisation they had acquired from them. Their country houses were built after the form of the Roman villæ. These comprised an outer court, or *villa rustica,* containing detached buildings for storing corn and other purposes connected with agriculture, and houses for the farm-servants, artificers, and others ; while the inner court formed the *villa urbana,* and was the residence of the proprietor and his family. This arrangement was afterwards followed in the mediæval castles, with their outer and inner wards.

The influence of the Roman forms of plans and design may also be traced in many other directions. A striking example of this is the mediæval monastery, which was, in general plan, a direct imitation of a Roman house. The cloister with its pillars surrounding an open court, having apartments opening off it, is clearly derived from the Roman peristyle of the town house, and the *villa urbana* of the country mansion —the part of the house reserved for private use. The outer court, with its stables, granaries, etc., corresponds with the *villa rustica* of the Roman country house. The *tablina* becomes the chapter-house. The kitchen and refectory are in both cases situated on the outer side of the court. The style of workmanship used in the masonry of buildings erected up to the eleventh century was also of Roman origin. The town of Carcassonne in Languedoc still retains its Roman walls and towers, and traces of Roman works utilised and incorporated in mediæval structures are to be found in the walls of Arles and many other localities in the southern parts of Gaul, where the Roman influence was strongest. In the northern parts of Gaul the destruction of Roman buildings was more complete, owing to the devastation caused by the incessant invasions of the Norsemen.

Under the Carlovingians a similar form of plan for house-building to that of the South, above referred to, was adopted throughout other parts of the Empire, but with modifications in different localities. A large outer court contained all the buildings connected with the cultivation of the soil, and the workshops of the necessary tradesmen ; and where a Frankish chief resided there arose in the midst of the court a hall, set upon a mound, which formed the house of the chief and his family. The whole "villa" or castle was enclosed with a ditch and palisade for defence. These establishments were generally on the plain, for the convenience of agricultural pursuits, in which case the hall was set for security on the top of an artificial mound or motte, thrown up from the ditch which was dug around it. In that situation the hall and other erections were generally of wood. Such fortifications were common to the Northmen, both on the Continent and in England. Numerous examples of castles with defences composed of earthen mounds and ditches are illustrated by M. de Caumont in France, and Mr. Clark in England. These were provided with wooden palisades, and the chief's hall was also built in

wood. The wooden erections have now of course disappeared, but the enclosing ditches and mounds and the central motte may still be traced.

The wooden castle on the top of the motte, with the steps leading up to it, may be seen depicted in the Bayeux Tapestry, and other mediæval designs.

In the hilly parts of the country the castles were naturally situated on a height, or the edge of a cliff, and the shape of the enceinte was necessarily regulated by the configuration of the ground, its slopes or precipices being made available for defence. The hall or keep was set either on the most elevated point, or so placed as to defend the weakest places. In mountainous districts, where stone abounded, it naturally soon came to replace wood as the building material. The space afforded by special sites was frequently not large enough to contain all the dependencies. In such cases the various out-buildings wereerected at the base of the hill or escarpment, and were included within an outer enclosing wall, or palisade and ditch, thus forming a second court or basse-cour. The keep was usually so placed as to command and defend these out-buildings.

It was soon found that the keep in the centre of the court was not conveniently situated for defence, and that it was better placed next the outer wall, so as to allow the garrison to make sorties and take the enemy by surprise, and also to permit the garrison in case of need to escape. We find the keep thus placed from the eleventh century. This was also the case in the fortresses composed of earthworks, the motte being usually placed on one of the lines of the enclosing mounds.

The Normans adopted a similar arrangement of their defences from the eleventh century. Till nearly the middle of that century the fortresses of Normandy consisted entirely of earthworks, with wooden palisades and buildings, but from that date square towers or keeps began to be built. The Normans devoted their attention chiefly to making these keeps of great strength, while the outworks were of comparatively small importance, and did not include the extensive courtyards common in other parts of Frankia. One reason for this may have been that the Normans worked together, and placed their castles so as to occupy strategic points, and protect one another and the country round about them. The Frank castles, on the other hand, were isolated and independent, each being constructed for the defence of the lord and his retainers, with their families and possessions. The latter castles were therefore necessarily of great extent, and the outer works are of first importance.

The first idea of the Norman keep was probably a wooden block-house for the protection of valuables, booty, etc., defended with ditches or earthworks. When the Normans had more thoroughly established themselves in the country, they began to build their castles of stone, and by the time of the Conquest of England the north of France was well supplied with castles, some consisting of the earthworks above referred to, and

others of quadrangular stone-built keeps of the usual well-known Norman type.

In England the Roman influence was much less marked than in Gaul, nearly all the Roman buildings having been destroyed by the Danes in their frequent invasions. A few buildings, however, such as Porchester Castle and Pevensey, still remain, and have been incorporated by the Normans in their castles. The fortresses of the inhabitants up to the eleventh century consisted of earthen mounds and ditches defended by wooden palisades, such as we have seen were common at the same period in the north of France. As in the latter, the hall or castle of the chief was built of wood, and stood on the top of the motte or earthen mound thrown up from the excavation of the ditch surrounding it. It was approached by a straight wooden stair up the slope of the mound, and protected by a drawbridge. There are hardly any traces of building in stone and lime before the Norman Conquest. After that date the erection of Norman keeps became common, but the old wooden towers and other defences were in many cases long retained.

Of Norman keeps there are abundant examples remaining both in Northern France and England. After the Conquest, England was covered with castles of this type, such as Dover, Rochester, Newcastle, the Tower of London, etc. These Norman keeps are always square or rectangular in plan. They have generally flat pilasters on the exterior, the angle pilasters being carried up above the parapet in the form of a square or round turret at each corner. The walls terminate in a crenelated parapet about 2 feet thick and 5 feet high, carried up flush with the face of the wall, and concealing the roof. The roof is of the simple coupled form, with a gable at each end, but the ridge does not rise above the parapet. There are no projecting corbels with machicolations between, the only machicolations used being long openings in the floors. The merlons are broad and the embrasures narrow. The larger keeps have the entrance protected by a forework. This is a building the full width of the keep, and attached to one end of it. It contains a straight stair leading to the true entrance of the keep, which is on the first or second floor. The entrance to the forework is protected by strong oak doors, and bars running into the wall, and sometimes with a portcullis. A tower rises above the doorway, from which missiles may be thrown on an enemy attempting to ascend the straight stair. There are also sometimes intermediate doors with towers above them, and at the top of the stair a vestibule, well defended, and sometimes approached by a moveable bridge. In the upper floors of the forework was occasionally placed the chapel, and the prisons were often under the stair.

The interior of the keep was very simple in its general arrangements. The door on the first or second floor leads into the chief room or hall, where all the garrison lived and slept. From the hall a stair conducts

down to the ground floor, which contained the stores, and another stair leads to the upper floors and battlements. The upper floor is generally appropriated as the owner's private apartment or bedroom. Many of the older keeps have been raised a story in Norman times to obtain additional accommodation, and a flat leaden roof introduced, which was useful for working military engines. This was managed without heightening the building, by utilising the space formerly occupied by the gabled roof.

The French keeps are similar in general idea, but varied in details. In some of them there is a large open top story, where all the garrison might assemble for the defence of the parapets. The Norman keeps have always walls of great thickness, and trust to the passive resistance they thus offer to attack. The idea of defending the

Fig. 1.—Keep of Château d'Arques from the North-East.

keep by flanking towers has not yet been recognised. The ground floor is sometimes vaulted, and the upper floors are invariably of wood. There are usually only small loops or air-holes on the ground floor, and the windows in the upper floors are small externally, although with wide bays internally, generally containing stone seats. In large halls there is sometimes an upper passage in the thickness of the wall, with a row of windows in the outside wall, and arches in the inner wall next the hall, like the triforium arcade of a church. The interior stairs are spiral, and

carried up in the thickness of the walls, usually at the angles. There are also frequently small chambers constructed in the thickness of the walls, used as bedrooms, garde-robes, etc. These generally enter from the ingoings of windows. The well is frequently under one of the walls, and a circular opening is carried up to the first floor, and sometimes to all the floors, for the supply of water.

Large keeps, like Rochester, are divided by a wall, which has often wide-arched openings on the principal floor so as to form one large hall, while the upper and lower floors are divided into two apartments with doors between. The passages and stairs are generally arranged so as to puzzle a stranger, and so that no one can go out or in without passing through the hall and being seen. Secret passages and exits are provided

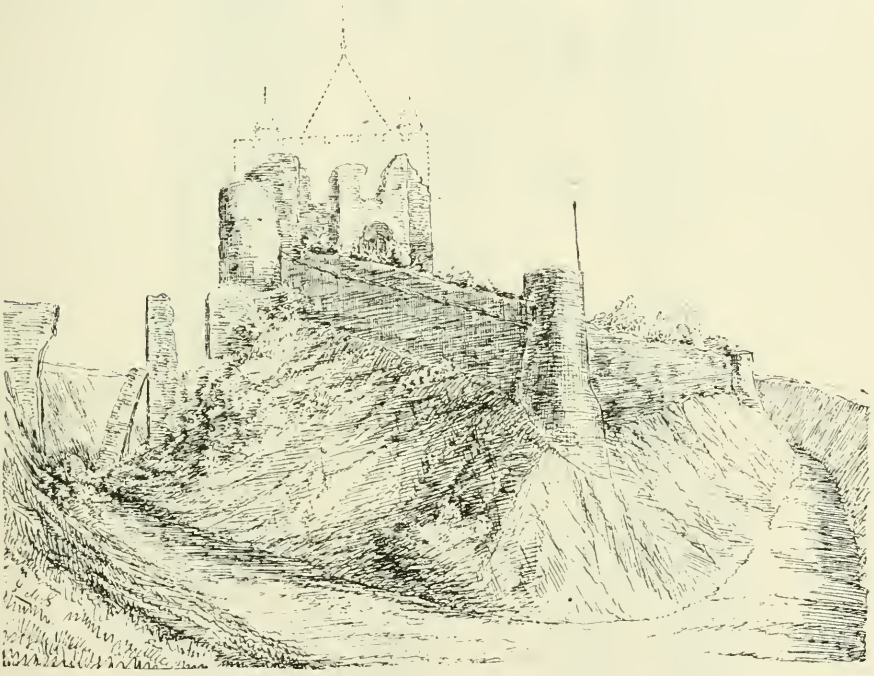


Fig. 2.—Château d'Arques. Exterior, showing Ditch.

for escape, and there are frequently subterranean passages and stairs cut in the rock beneath the castles, giving exit to the ditches and outworks.

These keeps are generally provided with fireplaces, and there is usually an oratory or chapel. The kitchen is frequently not observable, but is usually on the level of the hall, or even in the upper floors.

The following examples of Norman keeps in France and England will explain and illustrate the above general descriptions :—

The Castle of Arques (Fig. 1), in the north of France, comprises one of

the earliest keeps on record, having been built by William of Arques, uncle of the Conqueror, in 1039-43. The entrance is by a forework (at the right hand in the view), the stair commencing at the north-west angle, passing through a buttress, and then up the west side, where it was strongly

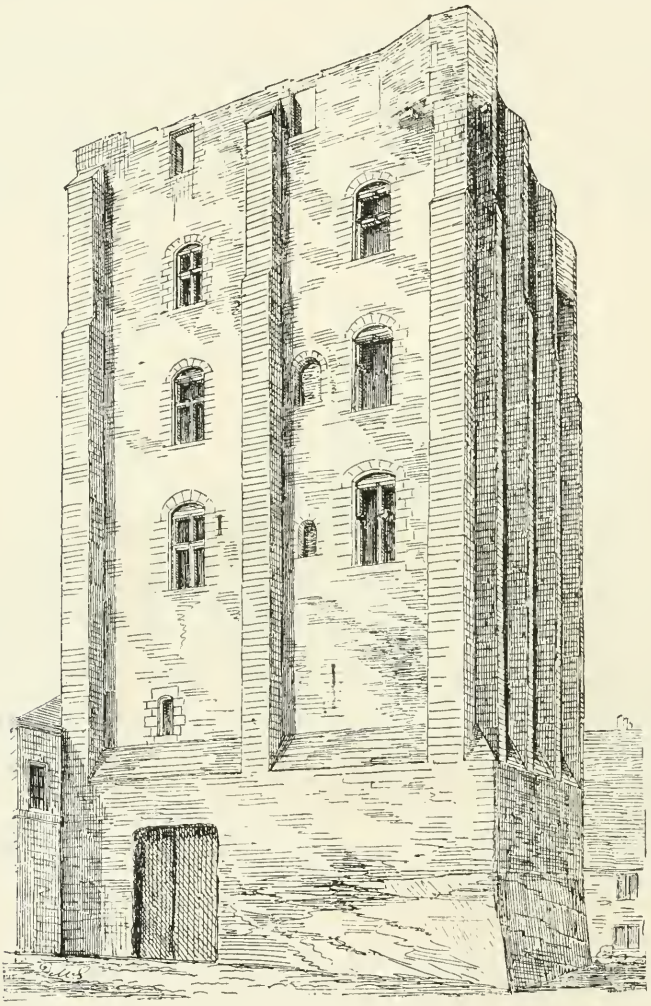


Fig. 3.—Château de Beaugency.

defended. The buttresses in this instance project much more than usual. The interior is divided by a central wall, and M. Viollet-le-Duc shows how this was made available in the defence of the keep.

The general view (Fig. 2) shows the immense ditch, about 60 feet deep,

cut in the chalk rock, which surrounded the enceinte, and the crest of which was fortified with a strong palisade. The dotted lines indicate the probable finish of the top of the keep, and the ruins of the bridge which crossed the ditch from the postern are also visible. There are numerous sub-ways cut in the chalk rock under the wall of the enceinte, some of which are now visible from the exterior. These were intended to counteract the mining operations of the besiegers. It will be observed that the keep is so placed as to touch the wall of the enceinte.

Beaugency (Fig. 3), on the Loire, is another French keep of great size and height, belonging to the eleventh century. The narrow projecting buttresses are unusual features, but somewhat resemble those of Arques. The mullioned windows, which are large compared to the Norman openings, are evidently insertions of the sixteenth century. The entrance door is on the first floor, without any forework.

The keep of the ancient royal castle of Loches (Indre et Loire) is large and imposing.

The pilasters on the faces (Fig. 5) are of a form unusual in castles, but more frequent in Ecclesiastical Architecture. The forework is also of peculiar form, being here developed so as to form a building of the L-plan (Fig. 4), so often adopted in later castles.

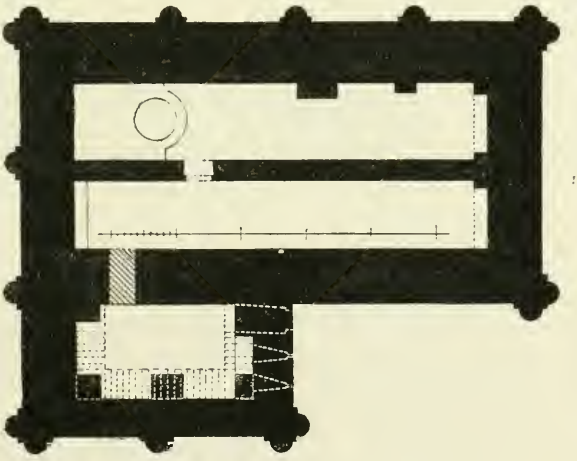


Fig. 4.—Loches Keep. Plan of Basement.

There has been an external flight of steps up to the door of the forework, which was on the first-floor level. The forework itself forms a vestibule, with a staircase to the second or principal floor running round the walls on three sides, the steps being partly overhung. There was also a door to the first floor from the vestibule. The basement floor of

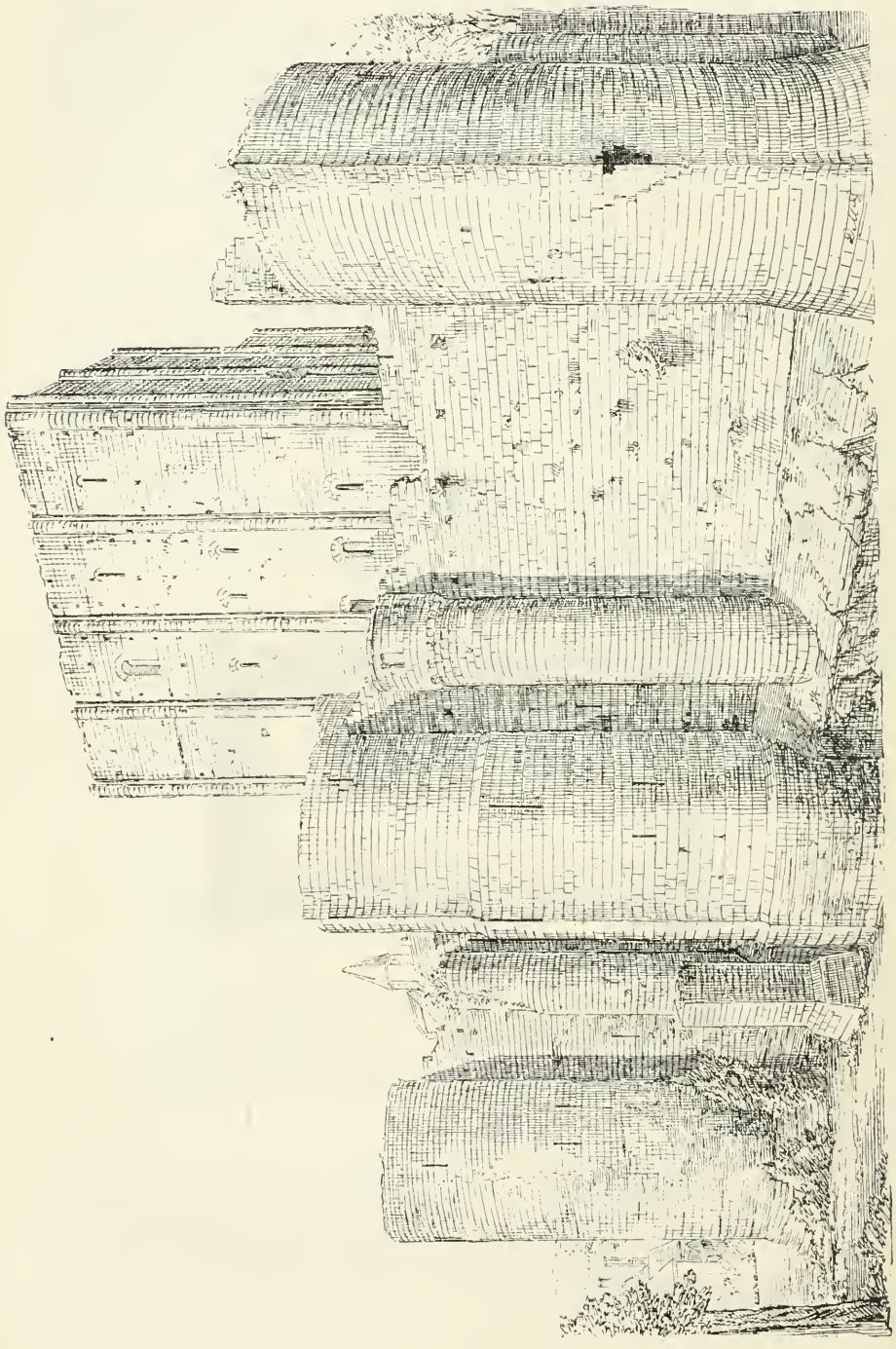


Fig. 5.—Loches Castle. Keep and Wall of Enceinte.

the vestibule was probably a prison, and the chapel was situated above the staircase.

The walls surrounding this castle are of great extent, and are a fine illustration of the style of the thirteenth century, and will be referred to further on.

A greater number of Roman buildings seem to have survived the ravages of the Norsemen in England than in Northern Gaul. At Porchester and Pevensey the old Roman walls and towers, with the distinctive small dressed blocks of stone bound together with bands of thin tiles, still remain. These old walls, built in Roman times, have since

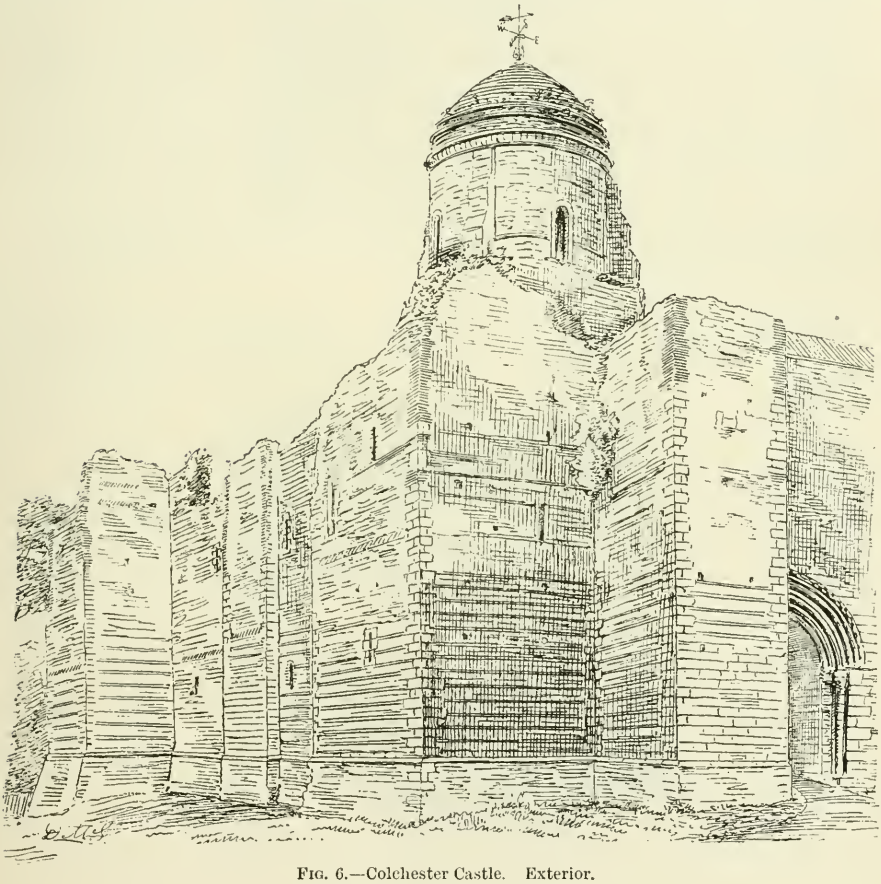


FIG. 6.—Colchester Castle. Exterior.

witnessed the innumerable descents of the Saxons, and the landing of the Normans under the Conqueror. They have played an important part in the wars between the Norman kings and their subjects; they have seen the sea retire for miles from their walls; and they still subsist, in all their

solid strength, to attest the vigour and power of their originators. But in England, as in Northern Gaul, after the tenth century, the Roman manner of building was but little followed. Some examples, however, remain where Roman workmanship and materials have been closely imitated.

Colchester Castle, in Essex, for example (Fig. 6), has so great a resemblance to Roman work, that it was for long supposed to be a Roman building, and to have been erected as a shrine for some Pagan deity. There seems now, however, to be no question as to its being a Norman castle, built largely, like the priory adjoining, with bricks formed in imitation of the Roman pattern. The Norman entrance doorway, shown on the sketch, is a later addition; the original keep probably dates from the end of the eleventh century. The entrance door was then, no doubt, on the first floor, immediately over the inserted Norman doorway. The extent of the building and its lowness are very unusual Norman features, but these may have been suggested by some previous Roman work on the site. The exterior walls were cased with ashlar, which has been to a great extent stripped off, and thus the interior construction of the masonry becomes visible, showing courses of bricks or tiles binding the rubblework together.

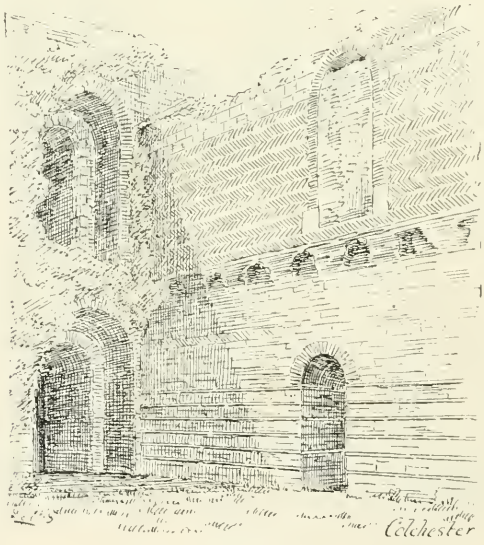


Fig. 7.—Colchester Castle. Interior.

The sketch of the interior of the keep (Fig. 7) gives a fine example of the "herring-bone" method of building with brick, derived from Roman times, and not uncommon in Norman brick-work, as at Guildford Castle and elsewhere.

The sketch of the keep of Newcastle (Fig. 8), although the building has been to some extent altered and restored, gives a good idea of the

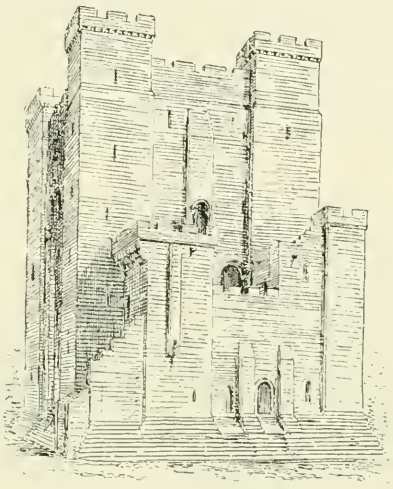


Fig. 8.—Newcastle Keep.

appearance of a complete Norman keep with its forebuilding, armed with its several towers guarding the stair leading up to the main entrance on the upper floor.

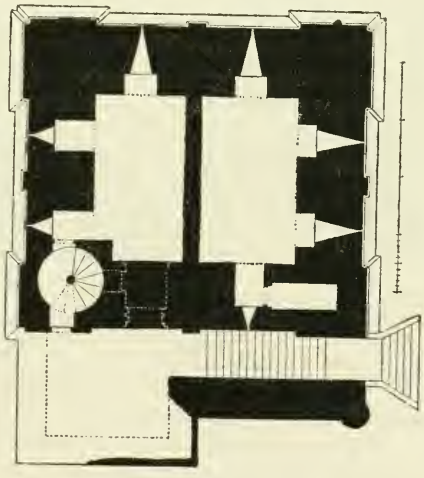


Fig. 9.—Castle Hedingham.

Castle Hedingham, in Essex, is a fine and very perfect late Norman keep. The plan (Fig. 9) shows that it is almost square, and divided into two compartments by a central wall. The keep has the usual broad

pilasters at the angles (Fig. 10), with a square sinking on the corners, and narrower pilasters in the centre of each face, all springing from a broad splayed plinth. The forebuilding is much destroyed, but its outline can still be traced, containing the stair to the main entrance on the first floor. This doorway has recessed shafts with good Norman caps and bases, and chevron mouldings round the arch. From this point a newel stair leads up to the second floor, which contains the great hall, and down to the

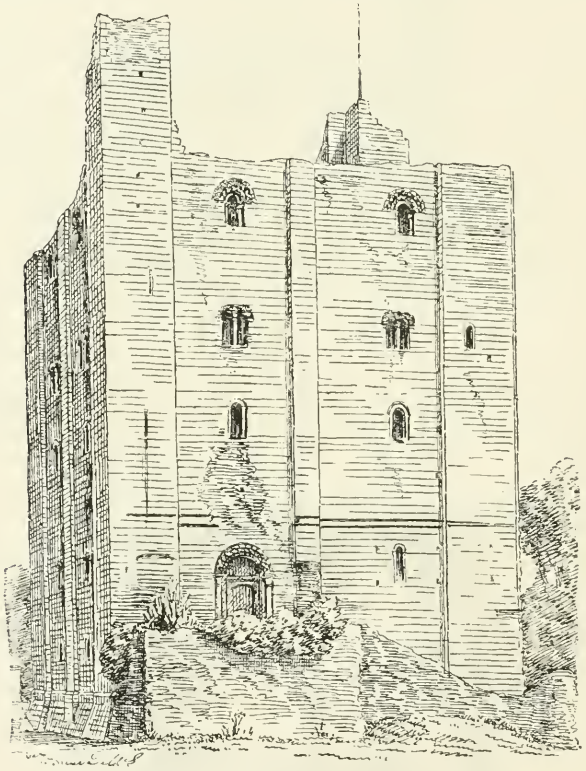


Fig. 10.—Castle Hedingham from the West.

basement, which, together with the first floor, contained the stores. The windows are all small externally, with chevron mouldings round the arches, but have wide square recesses internally, with full centred vaults. In the hall they are provided with stone seats in the recesses, and the wall arches are adorned with bold chevron ornaments. The hall is 38 feet long by 33 feet wide. We have here a fine example of the removal of the central wall so as to form one great hall on the principal floor. At Rochester this is effected by means of several arches, but at

Hedingham the whole of the wall on the principal floor is omitted, and the central wall above is supported on one grand arch which spans the whole width of the keep, or 33 feet. This arch is enriched with

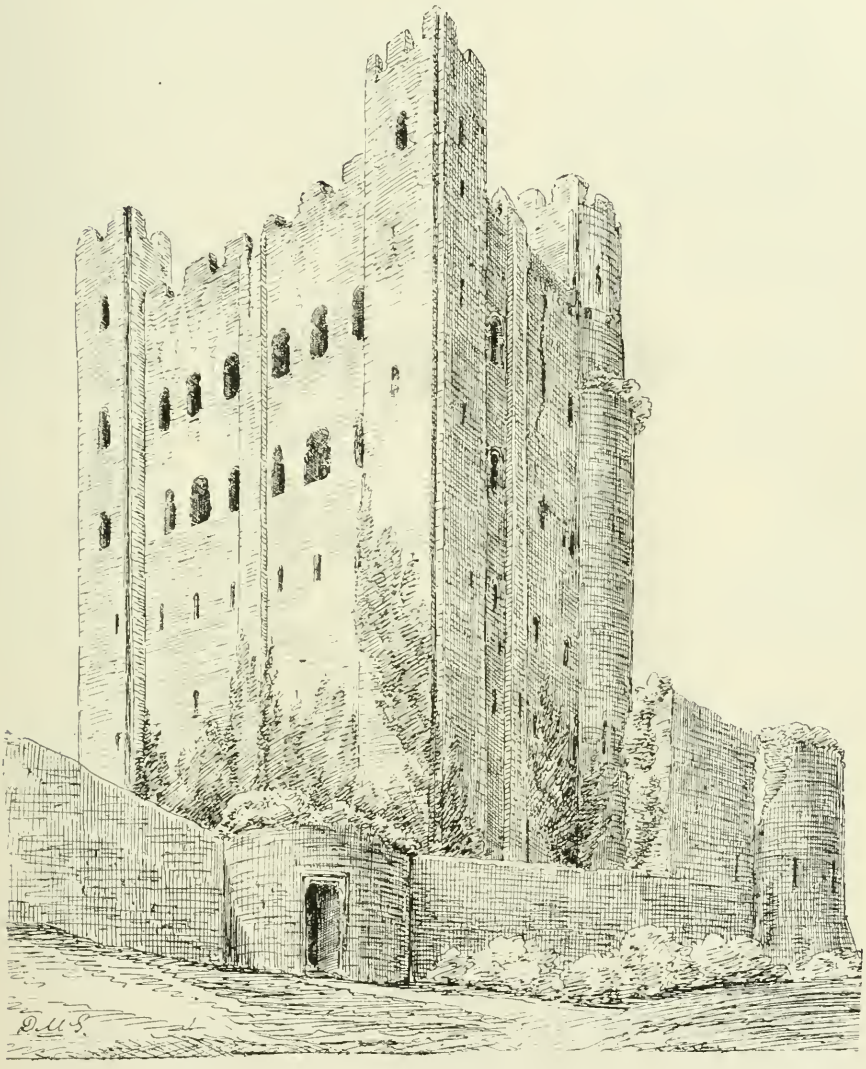


Fig. 11.—Rochester Castle from the South-West.

Norman mouldings, and springs from bold caps and corbels in the side walls.

The hall is two stories in height, and has the usual gallery running

round the upper floor, with arches in the inner wall to permit the hall to have the benefit of light from the windows. This is probably the finest hall of any Norman keep in England, and we regret that we are unable to give a view of it, all sketching being most strictly prohibited.

The Castle of Rochester (Fig. 11) is one of the noblest of the Norman keeps in England. Mr. Clark fixes the date of its erection in 1126.

It has the usual pilasters at the angles and on the face of the walls, the former carried up as turrets above the roof. The windows are small, and enriched with Norman ornament. The forework is much destroyed, but shows how the entrance was planned and defended. The stair (Fig. 12) commences on the west face, and has a landing at the north-west angle, where there are the remains of the arch forming the first door, over which there was a tower.

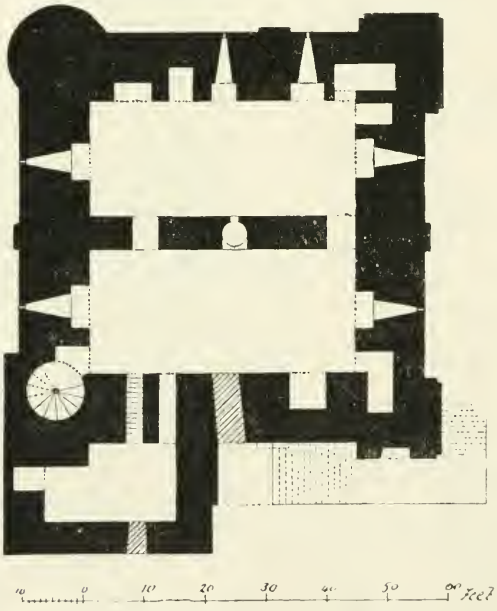


Fig. 12.—Rochester Castle. Plan of Keep.

The stair then continues along the north front till it reaches the level of the first floor. There the entrance to the vestibule was defended by a moveable bridge, with a pit beneath. The staircase was roofed in, and the passage over the drawbridge was defended by the outer wall, which was carried over the pit on an arch. The vestibule forms an outer post of defence before the entrance to the keep itself is reached. The plan shows the building divided by a wall near the centre. The well is under the centre of this wall, and from it a circular tube in the masonry

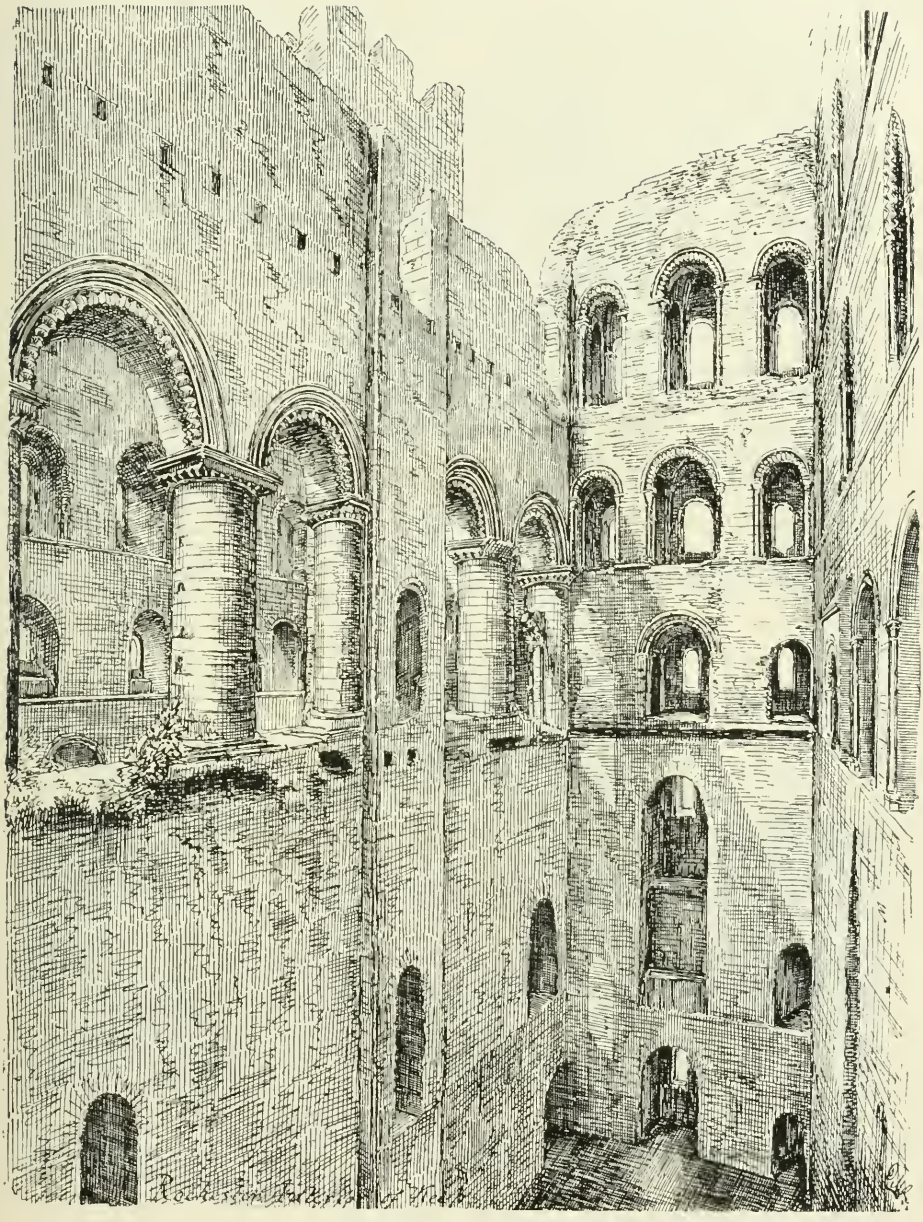


Fig. 13.—Rochester Castle. Interior of Keep.

is carried up to the various floors for the supply of water. The ground floor, and probably the first floor, were used as stores.

From the main entrance a newel stair in the north-east angle leads to the upper floors.

The view of the interior (Fig. 13) is taken at the level of the second, or principal floor, where the central wall is pierced with four arches, so that the whole might form one large hall. It appears, however, to have been divided by a lower arcade inserted between the pillars. Over the lower windows of this floor is a second tier of windows, between which and the arches in the inner wall a gallery runs round the building. The windows of the upper and lower floors are also seen. There are fireplaces on the principal floor, the chimneys from which are carried through the wall, and find vent in the angles of the outer buttresses. None of the floors are vaulted; the holes in the walls show where the wooden beams rested. The vestibule is carried up as a tower, and contains the chapel on the upper floor, and two tiers of prisons beneath the vestibule. The south-east angle was undermined in the siege by King John, and rebuilt in a round form. Near this point there was a door giving access to the battlements of the enceinte by a drawbridge from the keep.

Dover Castle (Fig. 14) contains a very large and perfect keep of the reign of Henry II.

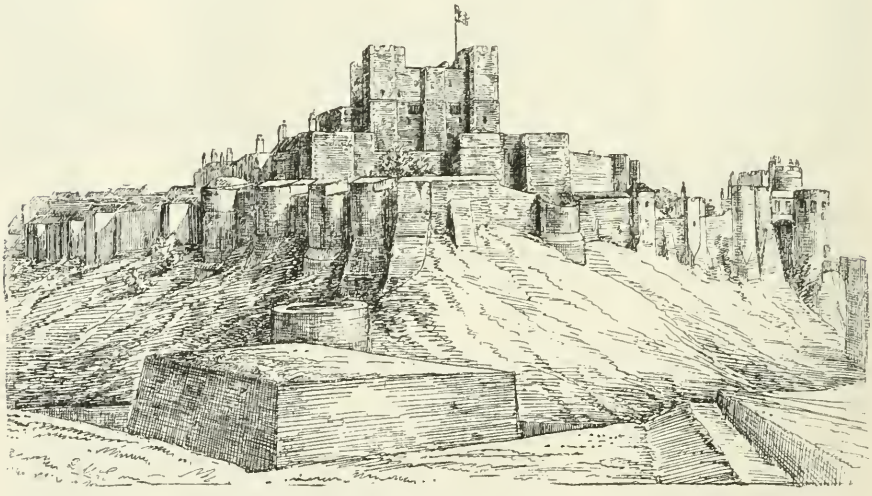


Fig. 14.—Dover Castle from the North-West.

The view shows the usual external characteristics of the Norman keep. On the left of the keep are seen the three towers of the forework, which here is very perfect, and leads up to the main floor of the building, which is on the second story. Surrounding the keep are the walls and towers of the inner or Norman ward, and the whole enceinte is enclosed

with the lofty walls and round towers of the thirteenth century. These

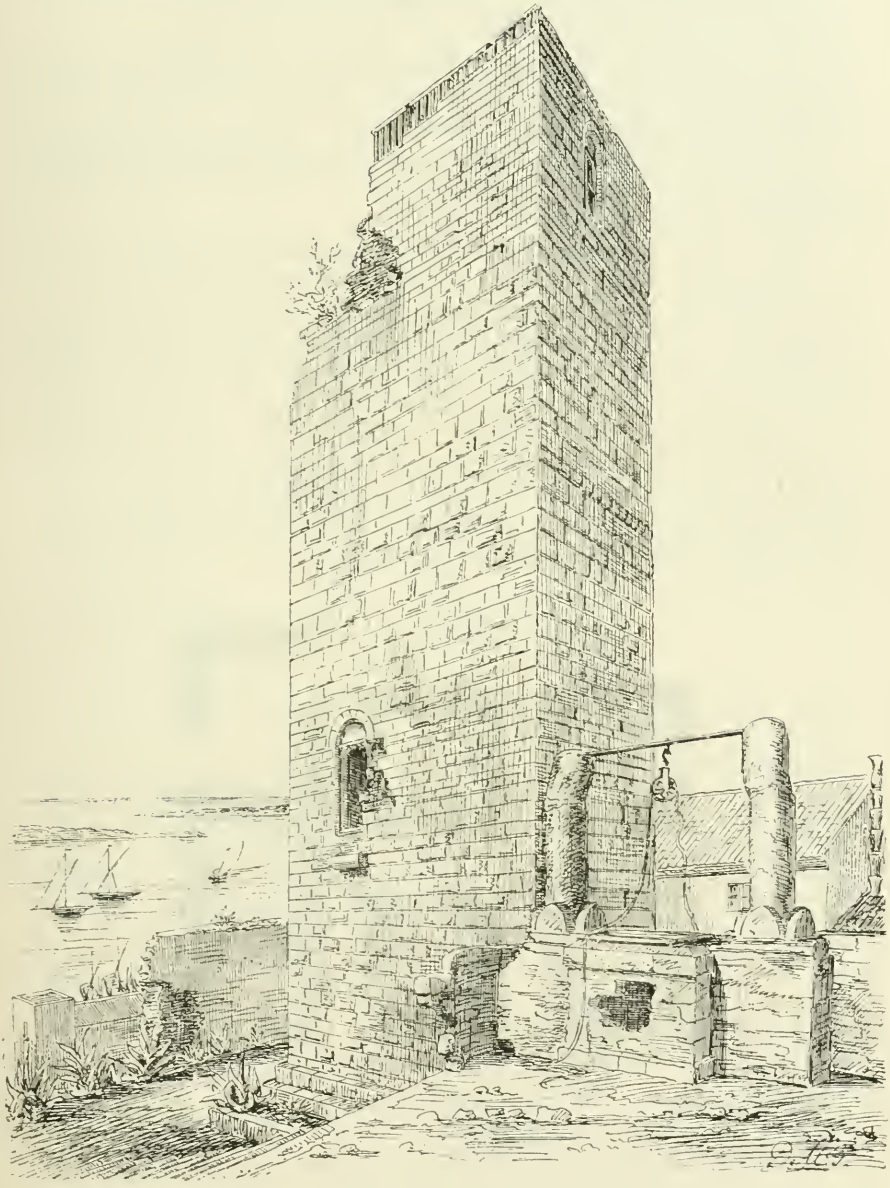


Fig. 15.—Mont du Chevalier, Cannes. Keep Tower from the North-West.

are now shorn of their battlements, for which modern works are substituted. To the right is a picturesque group of buildings of later date

(fourteenth century), called the "Constable's Gateway," with its drawbridge, which formed the principal entrance to the castle.

The enceinte is surrounded on this, the most exposed side, with a wide and deep ditch. The round tower rising in the centre of the ditch was an outwork, dominating the higher ground to the north-west, and communicating with the north-west angle of the enceinte by means of a covered way, and also with a spur work erected by Hubert de Burgh in 1216 for the protection of this weak point in the defences, and now converted into a modern ravelin.

From the above covered way, and in various other places, tunnels are cut through the chalk rock to assist in the defences, as at Arques.

From an early period square towers, somewhat similar to the Norman keeps, were in use on the coast of the Mediterranean. Many of them still exist in the towns along the Riviera, as at Cannes, Antibes, and many other places. These are built with solid masonry, carefully dressed on the joints, but left rough on the face, after the Roman manner of construction. The tower of the Mont du Chevalier, at Cannes, is a good example. It is built on a detached and rocky promontory jutting out into the bay, and was surrounded with a strong wall enclosing a courtyard, which contained a chapel and other buildings.

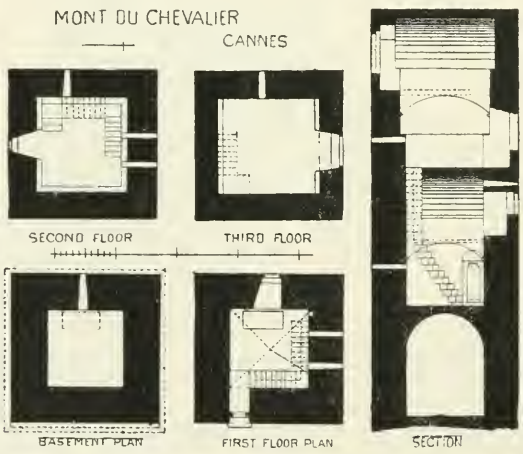


Fig. 16.—Mont du Chevalier, Cannes.

The plans and view (Figs. 15, 16) explain its design. The basement was vaulted, and had no windows, the only access to it being from a trap-door in the floor above. The entrance to the tower was on the first floor, and was reached by a wooden stair, the projecting step for receiving the top of which still remains. From this level a stone stair,

corbelled out from the interior of the wall, and running round the sides of the apartments, led to the upper floors. The roof was probably flat, and had a parapet with crenelations, which was only destroyed some years ago when the tower was struck by lightning.

The openings for light are small and narrow longitudinal slits in the masonry, without splay or ornament, and they have no internal bay, but are mere oblong holes passing through the walls.

This tower was built in the twelfth century.

The design of these southern towers was probably derived from that of similar Roman buildings, just as the northern keeps of the Normans may be another descendant from the same original. It will be afterwards pointed out how the same simple form continued for several centuries to be the ordinary plan of castles and houses in Scotland. It would thus appear that in all places, and at all times, the simple square tower seems to have been adopted as the most natural form in which to build a tower of defence.

Besides these Rectangular Keeps the Normans erected another kind of stronghold, called the Shell Keep. For several centuries before the Norman Conquest (as already mentioned) the castles of Northern Gaul and England consisted of earthworks with ditches and palisades, the buildings within these strongholds, like all the domestic buildings of the Saxons and Norsemen, generally being of wood.

A large number of these fortresses existed and were occupied at the time of the Conquest.

They were generally well situated for defence, and, like the early establishments of the Roman Gauls above described, they comprised an extensive enceinte, within which was a lofty mound or motte, with its ditch, having the chief's house built with wood on the top. It now (eleventh century) became the fashion with the Normans to substitute stone for wood in their castles, and, finding that a solid square keep could not safely be erected on the mottes of forced earth, they built a wall round the top of the mound and placed their dwellings as lean-to's against the interior of this wall, leaving a courtyard in the centre. These Shell Keeps are polygonal or curved in form to suit the ground.

As a rule, the Shell Keeps are always on an old mound, natural or artificial, while the Rectangular Keeps are on new sites without mounds, and the two forms of keep rarely occur together.

The Shell Keep, like the Rectangular Keep, is generally situated on the enceinte, and has its own ditch and drawbridge, and a steep flight of steps leading up the mound to the door.

Of the Shell Keep, the Castle of Gisors, near Vernon, in the north of France, may be taken as an illustration. It has the lofty artificial mound or motte, situated in the centre of a large enceinte surrounded with lofty

walls, the fine gateways of which still exist. On the top of the motte is the shell (Fig. 17) or wall of polygonal form, with flat pilasters on the angles. The entrance door is seen on the left, a plain archway, to which a straight flight of steps led up from the level ground below, where there was, no doubt, a drawbridge over a ditch which surrounded the motte, but is now filled up. There is a small keep or tower opposite the entrance, and the remains of a Norman chapel with circular apse against the wall of the shell.

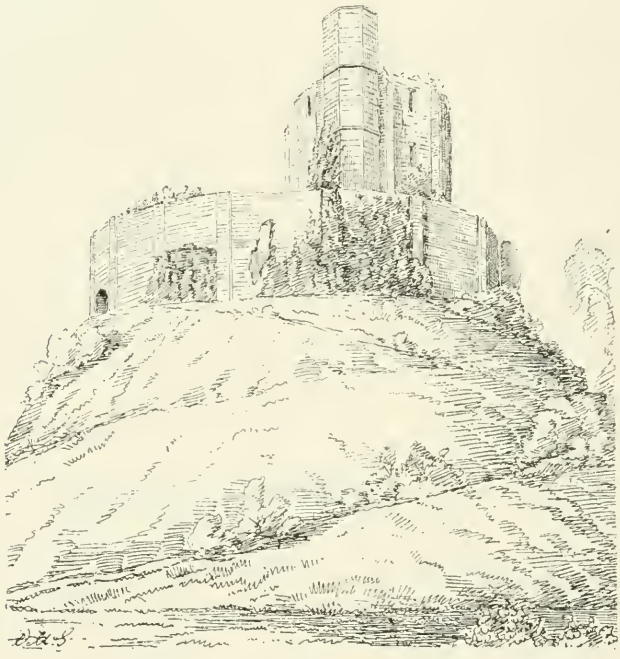


Fig. 17.—Gisors Castle. Motte and Keep.

The other buildings would be erected round the wall on the various sides. This keep was probably built in the latter half of the twelfth century.

The great tower of Windsor Castle (now rebuilt) gives an idea of the effect of a great shell keep raised on a lofty mound. Berkeley Castle, Gloucestershire, Durham Castle, and numerous other shell keeps, are fully described by Mr. Clark in his work on the Castles of England.

Norman keeps had always one or more castle garths or courtyards attached to them, enclosed with a curtain wall connecting with the keep, but not generally giving access to it from the wall battlements. Sometimes, as at Rochester, the keep is placed near the wall of the enceinte, but not touching it, so that it may either be joined to it by

means of a moveable bridge, or separated as required. There were square flanking towers at the corners of the enceinte, and at intervals along the curtains. These had usually wooden floors and stairs. The ditches are large and deep, and the counterscarp is protected by a palisade, as at Arques. The gateways are not important, and there does not appear to have been any outer barbican protecting them.

The enclosing walls, like the keeps, had no machicolated parapets, but it is probable that they were armed in some cases with projecting wooden hoards or bretêches, such as we shall see were so prominently used in the succeeding styles.

These keeps must certainly not have been very comfortable or luxurious places of residence, and as the Norman nobles became more settled in their possessions, they gradually began to build themselves more comfortable dwellings in the inner courtyard, reserving the keep as a place of last retreat in case of siege. The principal building in the inner court was the hall, with its appendages. The hall was a large building of stone or wood. It was either on the ground floor, or placed above a half-sunk story. In some of the larger examples the roof was supported either with one row of stone or wooden pillars down the centre, or with two rows of pillars, dividing the building into a central nave and side aisles like a church. Of this class we have still a fine example at Oakham, in Rutlandshire. (See Parker.) There was also erected in the court a solar or lord's room, generally over a cellar. The kitchen seems to have been originally a temporary wooden erection left open above. The buttery, pantry, etc., were also in use, but their position is not quite distinct; they were, however, probably near the entrance to the hall. It should be kept in mind that these were all *detached* erections, and that the offices, lodgings for soldiers, guests, etc. were usually temporary wooden structures, put up as they were required, and as speedily removed. In the outer court were situated a chapel for the garrison, barracks for the men, stables and sheds for horses and cattle, etc. The halls were sometimes defended with thick walls, crenelated parapets, and buttresses with projecting bartizans.

In towns the houses were almost universally of wood, and thatched, and only one story high. In London this was the case previous to the great fire in Stephen's reign, when regulations were made as to building party walls of stone. Some houses, however, still exist built with stone, and two stories in height, such as the Jew's house at Lincoln, a house at Southampton, etc. In these cases the living-rooms were on the first floor, the ground floor being probably used for stores. Fireplaces are usual, and the flues seem to have been (as at Lincoln) in the *side* walls, not the gables. The iron-work of this period is of the florid description usual throughout the middle ages. One striking peculiarity is that the external ashlar work of good buildings

appears to have been painted—the alternate stones of different colours, like a chess-board—and in order to carry this idea out the masonry was frequently plastered. This may perhaps have been a tradition from the Saxon times, when the wooden buildings then in use were undoubtedly painted externally.

In all the civil buildings of the period (twelfth century) there are abundance of characteristic Norman mouldings and enrichments, corresponding in style with the ecclesiastical edifices of the same date. The Norman style of castles continued till the close of the twelfth century. In that century considerable advancement had been made in the military art. During the Crusades the soldiers of the West had been taught many valuable lessons in the East, and in particular the use of improved military engines for the attack and defence of places. From about 1150 there were introduced powerful machines for throwing great stones, strong *cats*, or sheds on wheels, for defending the miners during their operations at the base of the walls, moveable towers for attacking the parapets of the curtains, etc.

It was then found that the angles of the square keeps were weak, and presented a tempting point for the attack of the miners while there were no flanking works to defend them. This led to the adoption of various modifications of the form of plan with the view of overcoming these defects. Of these modifications of plan we have a fine example at Étampes, between Paris and Orleans. This keep is built on plan (Fig. 18) in the form of a quatrefoil. The keeps of York and Warwick were also of that form.

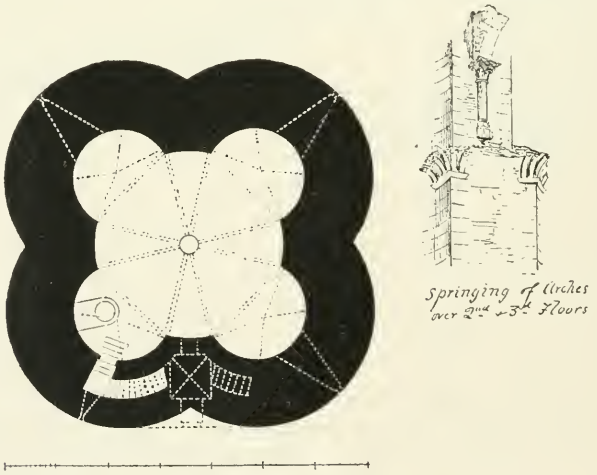


Fig. 18.—Château d'Etampes. Plan.

Étampes belongs to the latter half of the twelfth century. The details of the caps and bases of the columns of the upper story are of that

date. Here the entrance (Fig. 19) (now destroyed, but restored in the drawing) was on a landing half-way between the basement and the first-floor level, and was approached by a drawbridge from the wall of the enceinte. The aperture over the door opens into a small room in the thickness of the wall, from which the drawbridge was worked. A stair in the thickness of the wall leads to the upper floor, and also descends to the basement, where the well is still to be seen. The upper floors were vaulted in a peculiar manner; the imposts of the arches still exist.

M. Viollet-le-Duc gives a very interesting restoration of this building, showing how the upper floors were utilised in connection with the defence of the keep.

The sketch indicates (to the left) the probable appearance of the keep in time of peace, and also (to the right) the "hoards" or overhanging wooden defences with which it was armed in time of siege.

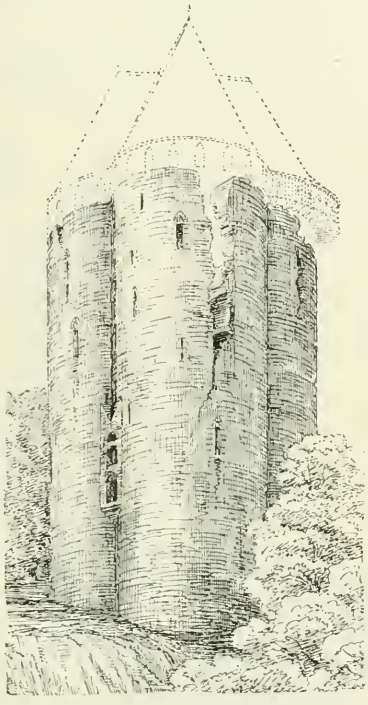


Fig. 19.—Château d'Etampes.

The Château Gaillard, on the Seine, built by Richard I. at the end of the twelfth century, is a splendid example of the castles of this transition period. It is situated on a lofty and detached promontory of chalk rock overlooking the course of the Seine, and defending the passage from the royal domain into Normandy.

The disposition of the various parts of the buildings and defences may still be distinctly traced, although the buildings are now much ruined. The plan of the Castle is given in M. Viollet-le-Duc's Dictionary.

The keep (Fig. 20) is of a rounded form, but it has the wall strengthened with a sharp angle or keel jutted out opposite the weakest side. It is placed on the enceinte at the highest and most precipitous part of the cliff. The defensive works are peculiar, and consist of a parapet with large machicolations, an invention which M. Viollet-le-Duc attributes to King Richard. The parapet is set on the top of buttresses, which rise out of the sloping wall of the building, and the arches thrown across between these buttresses left a long opening or machicolis between them and the wall, from which missiles could be thrown on besiegers.

The enceinte of the inner bailey is of a remarkable form, consisting

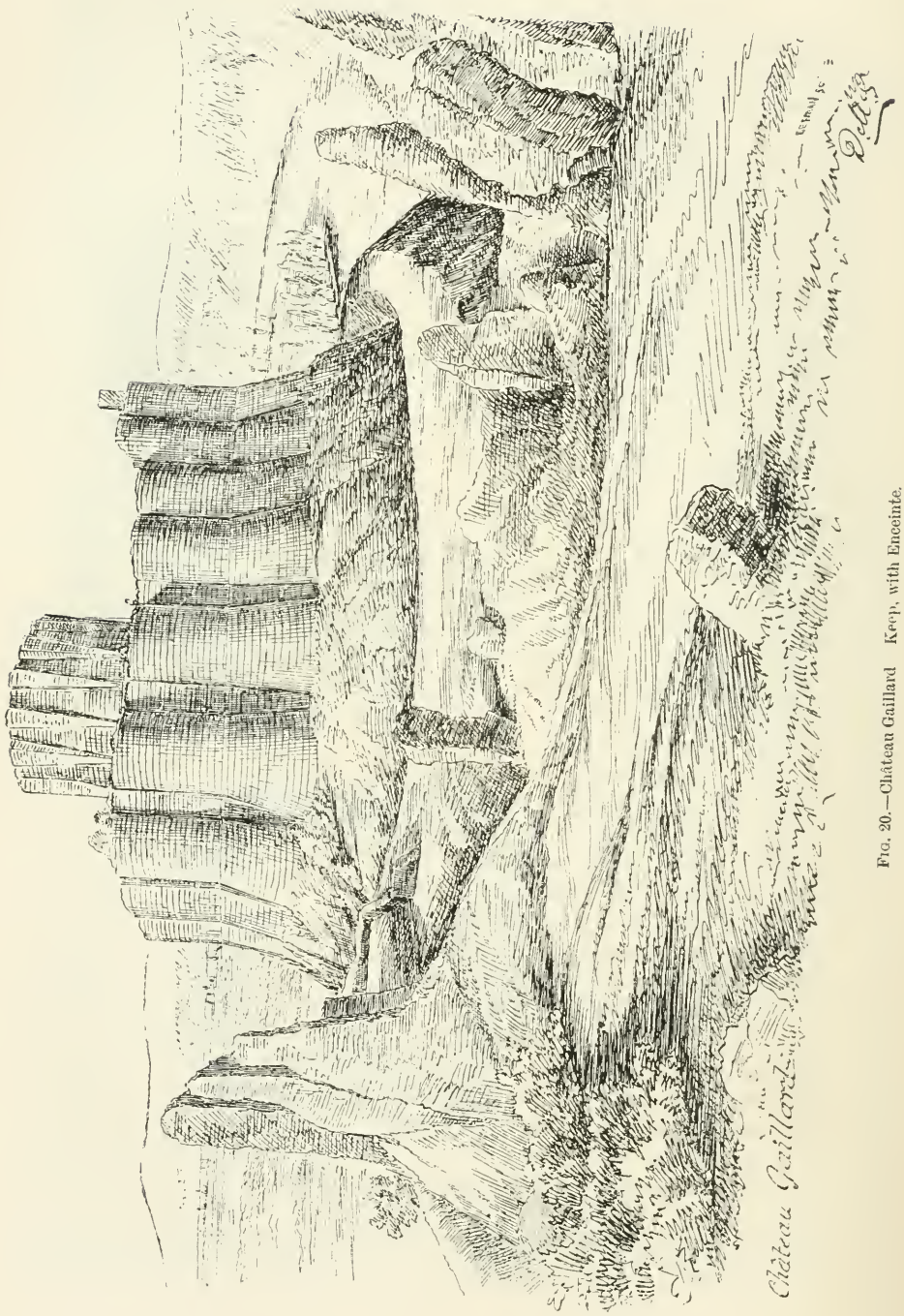


FIG. 20.—Château Gaillard. Keep, with Enceinte.

of a series of curved projections or rounds, so designed that every part of the base could be seen and defended from several parts of the parapet. The whole was further strengthened by a deep ditch cut in the rock.

The outer ward had also a lofty wall and deep ditch, and was fortified with round towers.

A triangular outwork to the east, also furnished with lofty round towers, guarded the approach from that quarter where the promontory joins the mainland.

In 1204 this castle stood a memorable siege by Philip Augustus, by whom it was taken from King John.

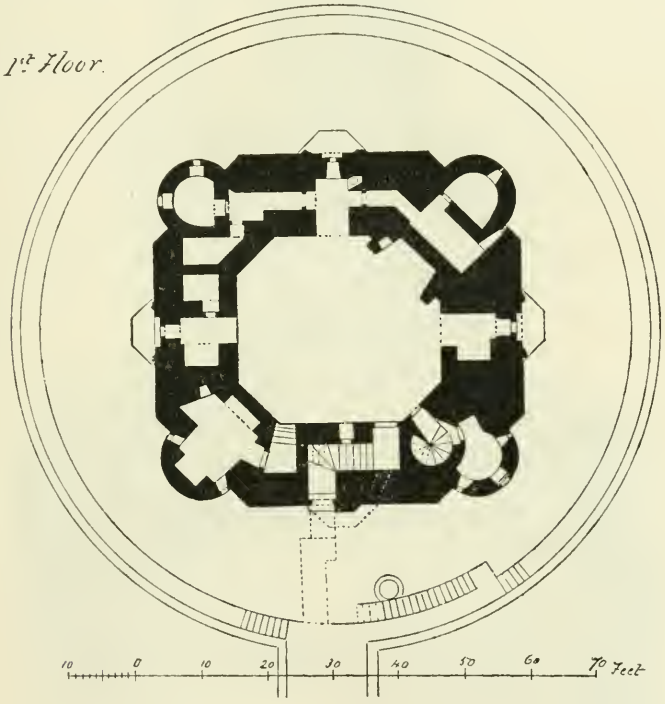


Fig. 21.—Château de Provins. Plan.

The Castle of Provins (south-east of Paris) is another instance of the various forms which were tried in the twelfth century. It is an octagon on plan (Fig. 21), four of the sides being smaller than the others, and having semicircular projections upon them. These in the upper stories become detached circular turrets, connected in their upper part by a flying buttress with the main keep (Fig. 22).

The entrance to the keep was by a drawbridge from the wall of the enceinte. M. Viollet-le-Duc supposes that there were drawbridges from the projecting ledge at the doors on the four sides to the enceinte. A

covered way for defence runs round the keep above the first-floor level, and above this were hoards projected out to a great distance. These, together with the angle turrets, enabled the garrison to attack the assailants on all sides and guard the keep in every direction.

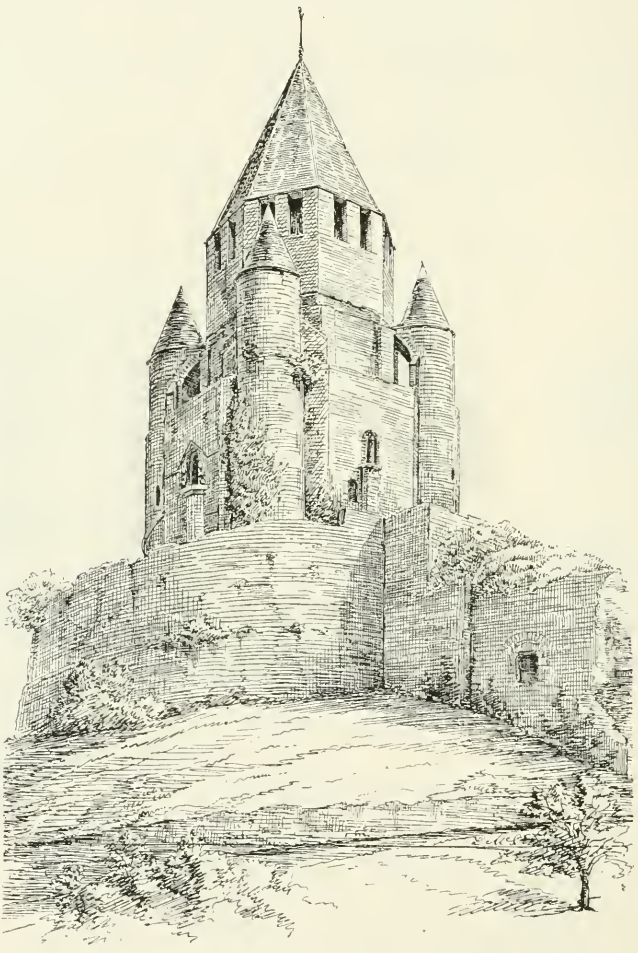


Fig. 22.—Château de Provins.

The existing upper story of the keep is modern, and the space within the enclosing wall or chemise was filled up by the English, when they took the place in the fifteenth century, in order to form a platform for their guns.

Of the transition period at the end of the twelfth century, England possesses one very fine example in Conisborough Castle, Yorkshire (Fig. 23).

This castle has been well illustrated and described by Mr. Clark. It

stands on the top of a steep rocky promontory, which was originally a Saxon stronghold, with its great ditch and palisaded crest, and lofty motte crowned with a wooden castle. The present castle appears to have been built by Hamelin Plantagenet, who held the Earldom of Warren from 1163 to 1201. The keep is circular, but has six buttresses, half hexagons in form, projecting from it, and giving it at a distance very much the appearance of the older square keep of the Normans.

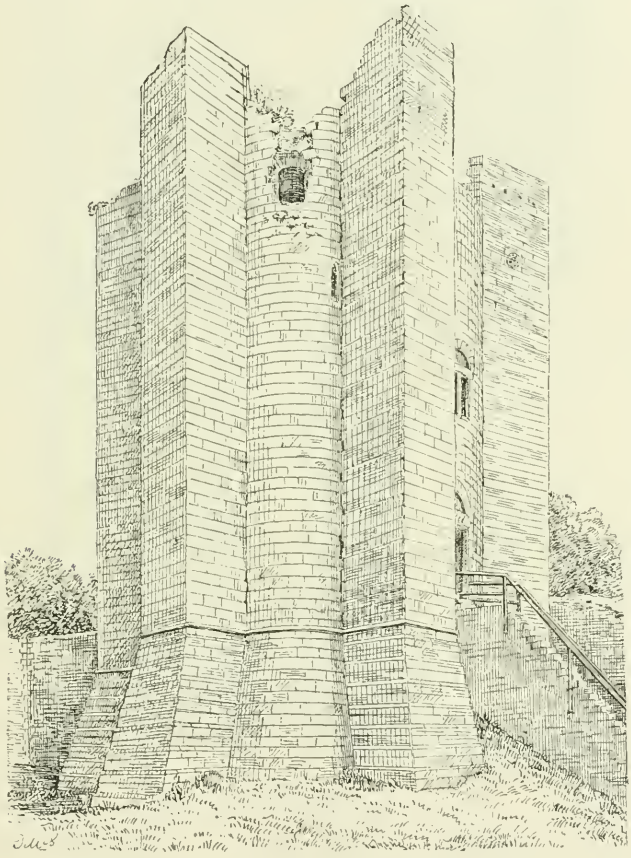


Fig. 23.—Conisborough Castle.

The keep is 66 feet in diameter, and measures 80 feet over the buttresses. The walls are 15 feet thick, and 90 to 100 feet high. The entrance door is 20 feet above the ground, and the stairs to the upper floors wind round in the thickness of the walls. The basement floor is vaulted, and has a deep well in the centre, and an aperture in the vault above to enable the water to be drawn up. Neither the basement nor

first floor have any loopholes for light; these must therefore have both been used as stores.

The hall is on the second floor, and the private room on the third floor. Above this there was also a room entering from the parapet walk for the garrison.

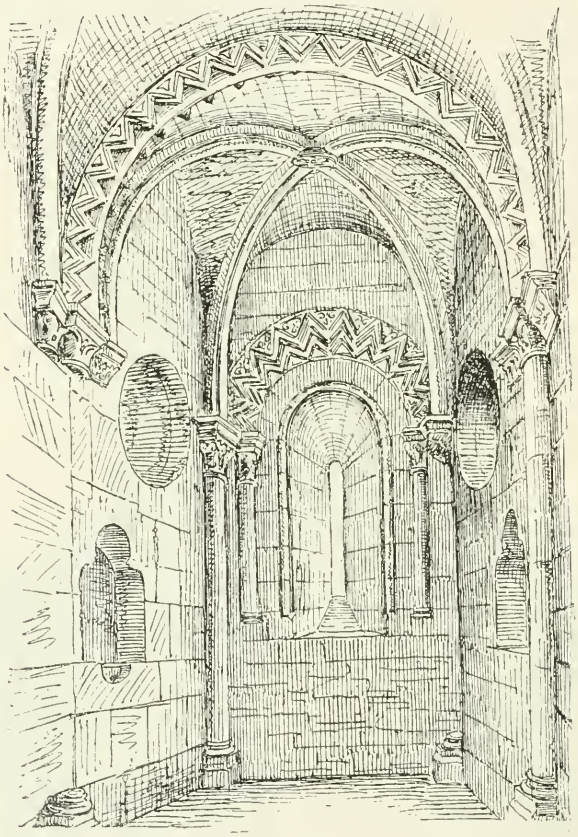


FIG. 24.—Conisborough Castle. Chapel.

The hall and private room have both fine chimneys, and the former has a window with full-centred recess and stone seats, such as are usual in Norman keeps, and which we shall find common in Scotch keeps to a very late period. Off the private room there is a beautiful little oratory built in the thickness of one of the buttresses. The style of ornamentation fixes distinctly the date of the building towards the end of the twelfth century.

The buttresses are carried up as turrets above the parapet, and one of them is fitted up with an oven, so that the baking may have been

done there, and the room in the roof may have been used as the kitchen. Another turret seems to have been designed for a dovecot, a mode of providing for the wants of the besieged which was also adopted in Scotch castles.

There is a large inner ward connected with the keep, in which the hall and other domestic apartments were situated. The keep was evidently not intended for a residence, but only as a place of last refuge in case of siege.

The above peculiar forms were ultimately superseded by *Round* keeps and towers, which were, for the same reason as the above varieties, introduced in place of square keeps by Philip Augustus; square towers being vulnerable at the angles, while no part of the circle was more exposed to the operations of the sapper than another. The round form was also more convenient for vaulting, which it was now found desirable to substitute for wooden floors, to render the building secure against fire. Along with the introduction of the round form of tower, the number of towers used for the defence of the enceinte was also greatly increased, and these towers were themselves frequently of great size and strength. By degrees the keep came to hold a secondary place in the defences, and chief reliance was placed on the towers and other subsidiary works, or rather the whole castle became a great keep, of which all the parts were artfully combined in such a manner as to be independent, while yet protecting one another. The law now came to be applied, that "that which defends should itself be defended." Each tower and separate part of the castle was self-contained, and possessed complete means of resistance, being provided with its own garrison and commander, with the necessary munitions and victuals, and free exit for assuming the offensive or for escape, while at the same time every tower was defended by its neighbours, and the curtains were flanked by the towers. The various towers were garrisoned in time of danger by the vassals, each tower being generally named after the vassal whose duty it was to defend it. The proprietor, shut up in his keep with his chosen band of followers, was thus independent of his vassals, in whom he could not always place full reliance. This system was in complete operation about the year 1200, and prevailed during the thirteenth century.

In the view of Loches, given above (Fig. 5), the walls of the enceinte, with their strengthening towers, are well illustrated. We have also here the keel or sharp angle on the face of the round towers, which was a favourite feature in France, but was never adopted in England. There is, however, an example at Bothwell Castle, in Scotland. The accompanying sketch of the gate and walls of Aigues Mortes (Fig. 25) shows the enceinte of a thirteenth-century town in wonderful preservation. This town was the port of France in the Mediterranean at the

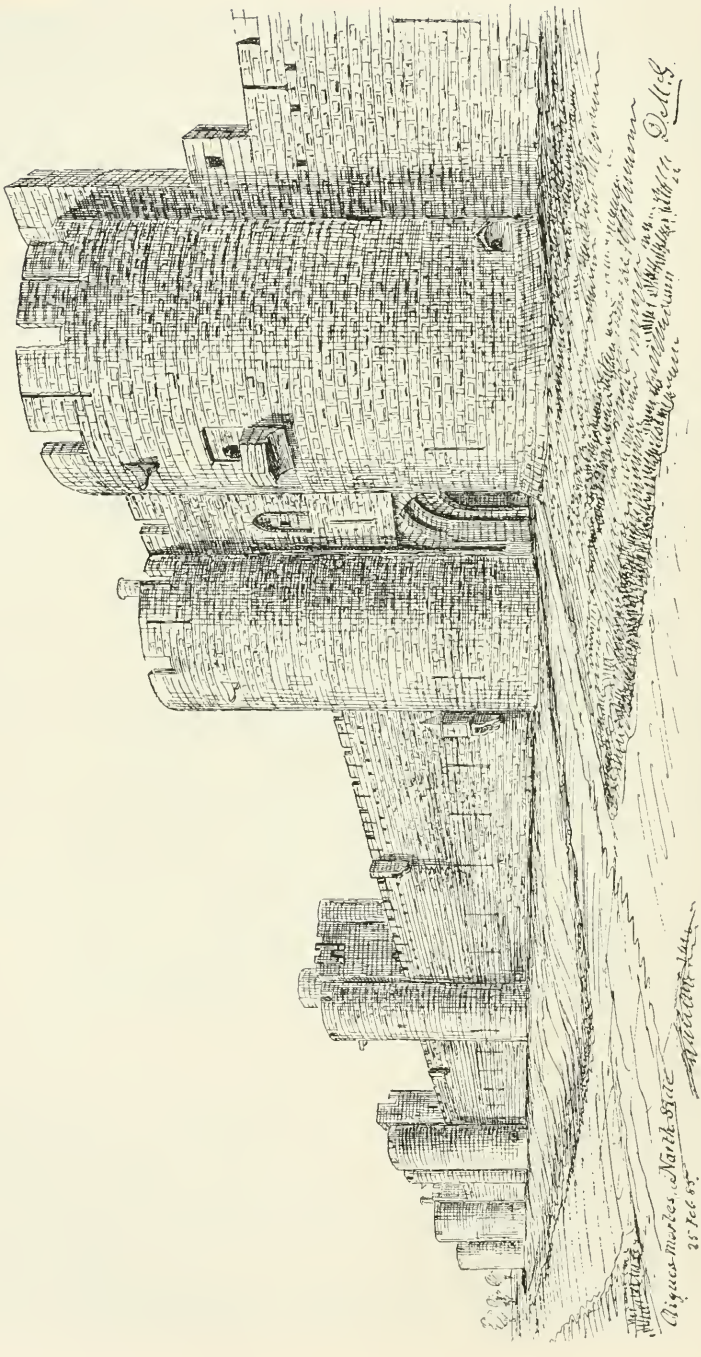


FIG. 25.—Aigues Mortes. North Side.

time of St. Louis, and it was from here that he sailed on his last crusade. The walls were begun by him, and finished by Philippe le Hardi, and they still remain almost as entire as the day they were completed in the thirteenth century.

In further illustration of the walls of enceinte of the thirteenth century, we give a general view of the Castle of St. André (Fig. 26), on the west side of the Rhone, immediately opposite Avignon.

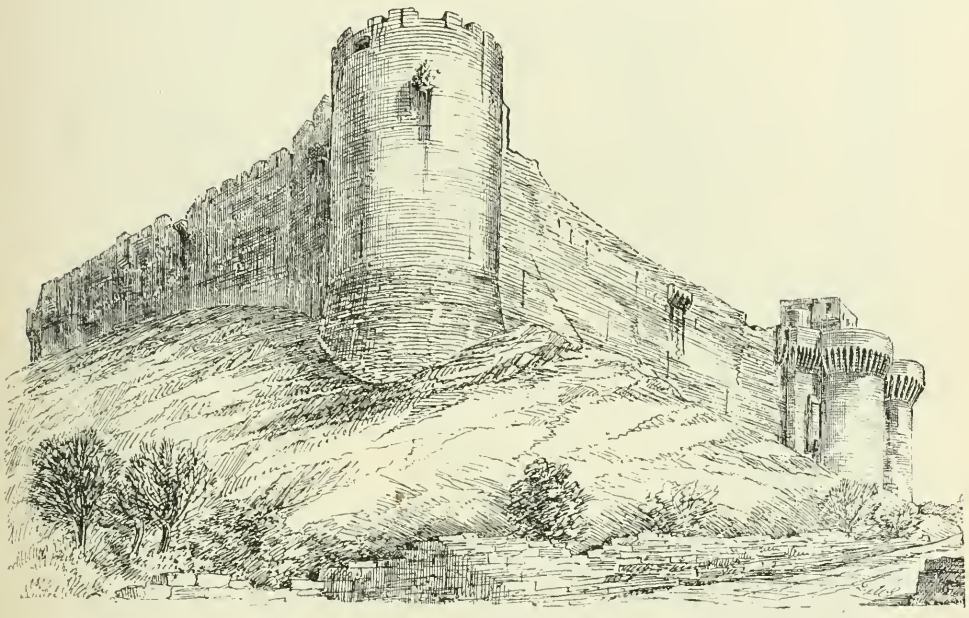


FIG. 26.—Château de St. André, Villeneuve lez Avignon.

This castle was built by Philip the Fair, at the end of the thirteenth century, for the defence of his territory on the right bank of the river. The general effect of these walls is similar to that of some of our English castles, such as Pevensey, and, as will be hereafter seen, has a striking resemblance to some of the early Scotch castles, notably that of Dunstaffnage. The round tower at the angle is only slightly projected beyond the face of the wall, being on a rocky platform like Dunstaffnage. It has not the bold relief which distinguishes the round towers of the period, as at Pevensey, when not limited by the nature of the site.

The gateway (Figs. 27, 28) is a splendid specimen of this class of building of the fourteenth century, and we shall find as we proceed that similar gateways were not unknown in Scotland.

The Tour du Pont (Fig. 29), at Villeneuve, also erected by Philip the Fair in 1307, to guard the passage into his dominions from Provence by

the Bridge of St. Bénezet at Avignon, is given as a striking example of a simple fort of the fourteenth century, and as presenting a remarkable

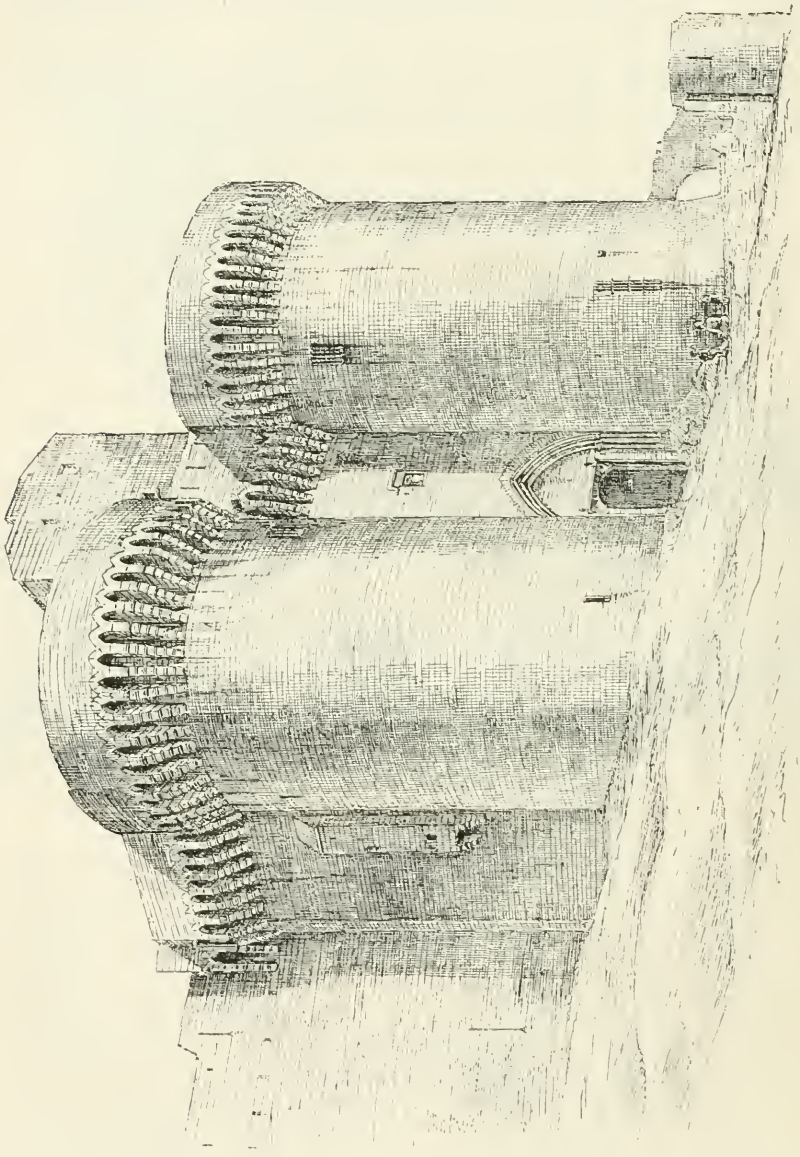


Fig. 27.—Château de St. André, Villeneuve lez Avignon. Exterior.

resemblance to many of the fourteenth and fifteenth century keeps of Scotland, such as Clackmannan.

During this century the internal domestic arrangements continued

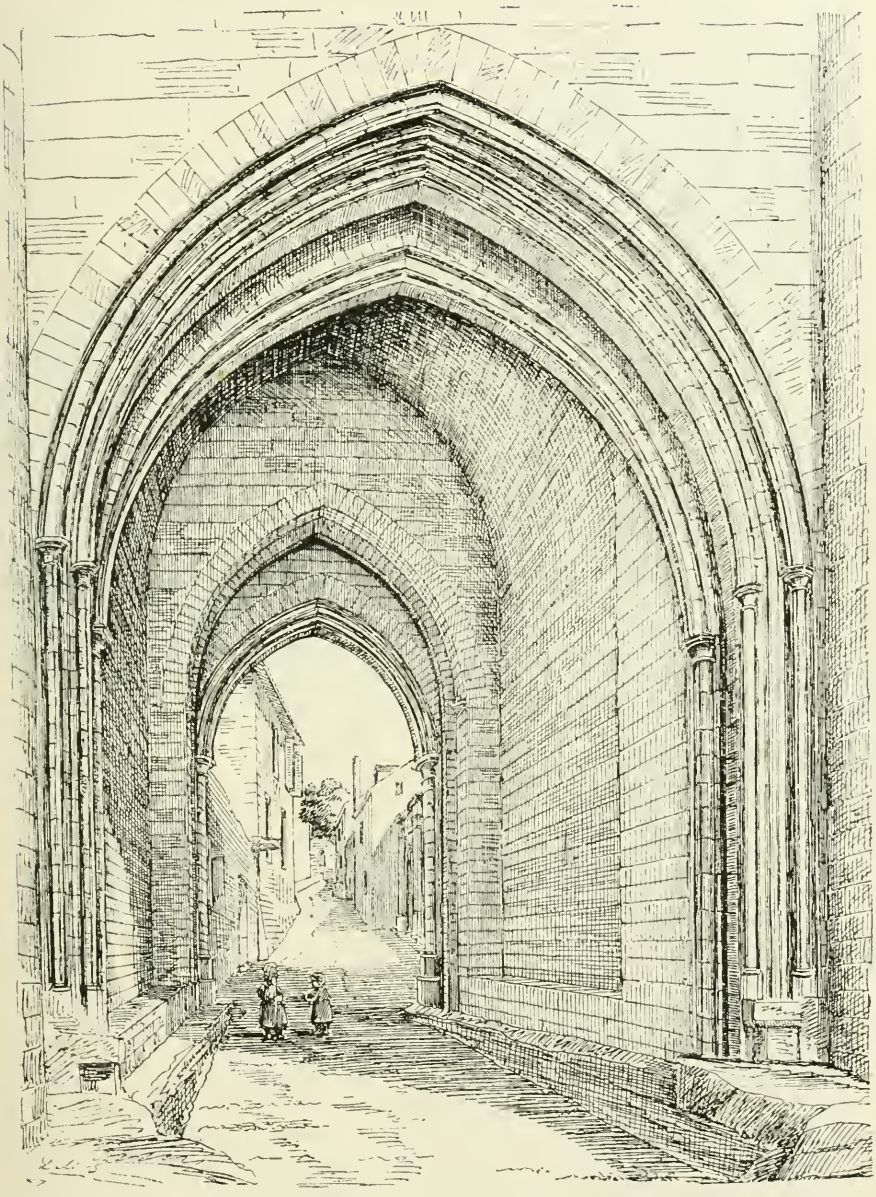


FIG. 28.—Château de St. André, Villeneuve lez Avignon. Gateway.

very much as in the later Norman castles, except that the lords began to isolate themselves and families from the garrison. Each castle contained.

besides the donjon (or place of retreat in danger), the hall, where the master and his retainers all lived and had their meals together, with the kitchen, buttery, and pantry at one end, and the lord's chamber or "solar" at the other, generally on an upper floor above a cellar.

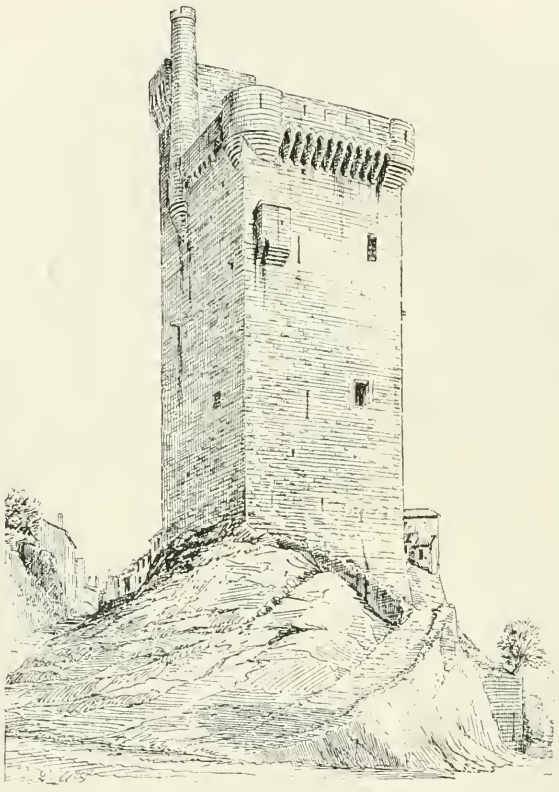


FIG. 29.—Tour du Pont, Villeneuve.

The donjons were planned with great diversity of arrangements for secrecy; they were not occupied in time of peace, and no strangers were admitted to them. Roche Guyon, between Paris and Rouen, is a good example of the care taken in the defence of the donjon. The habitable castle is built at the base of a lofty chalk cliff close to the Seine, and the donjon on the summit is approached by subterranean passages cut through the rock, which have stairs and pitfalls in them. From these the passage ascends to the rampart of the outer wall; it crosses thence to the rampart of the inner defending wall or chemise of the donjon by a moveable wooden bridge, and from the chemise to the door of the donjon by another moveable bridge. The north side of this donjon being over-

looked by higher ground, the walls, both of the donjon and the enceinte,

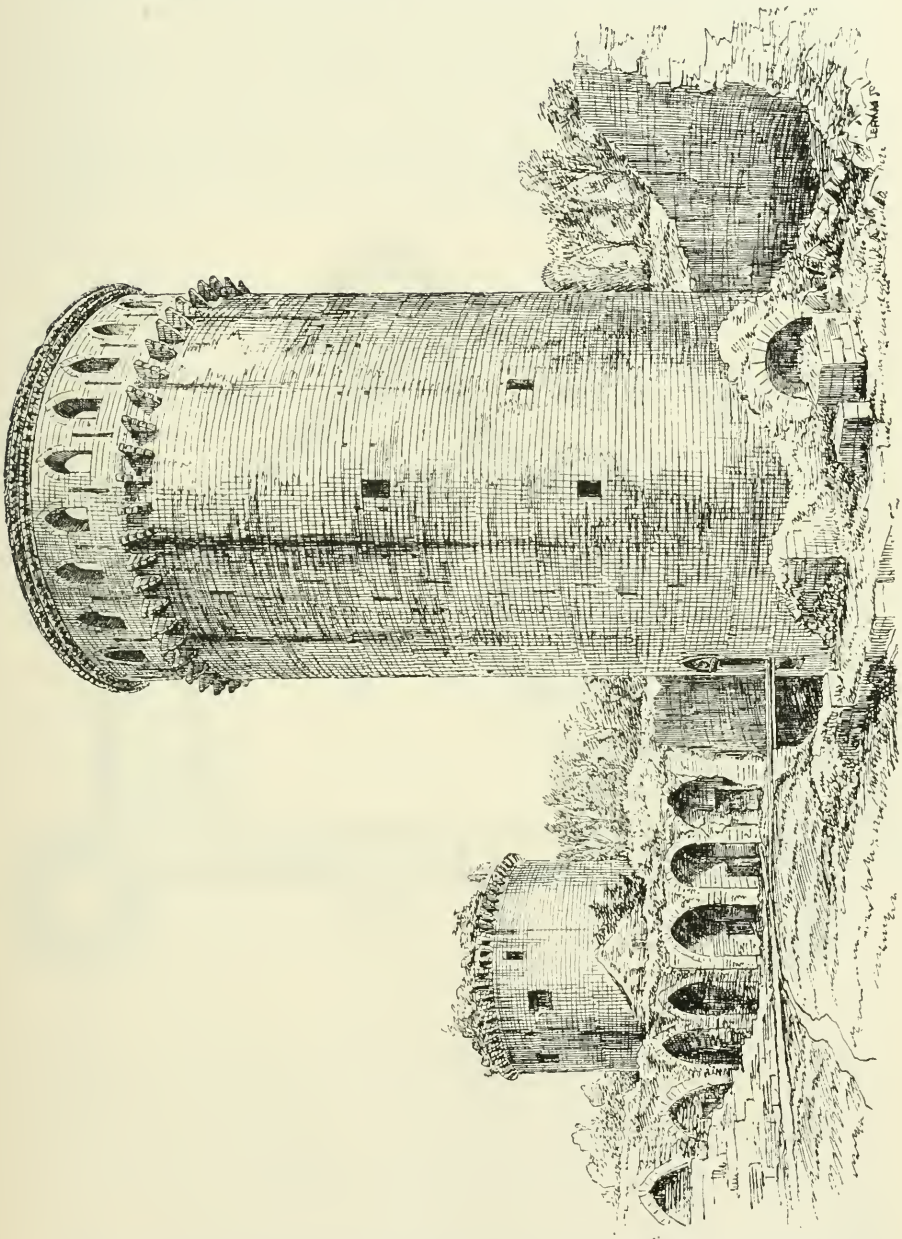


FIG. 30.—Château de Couey. The Keep from the Courtyard.

are thickened enormously, and run out to a sharp point or "bec" opposite the dangerous place (like the angle of the keep of Château Gaillard).

Of this period is the great Château de Coucy (Fig. 30), the circular keep of which M. Viollet-le-Duc justly calls the grandest military structure in Europe. The aspect of this immense keep and the massive towers and walls, when seen from a distance, is most impressive. This castle was built by the Duke Enguerrand III., 1223-30. The plan (from M. Viollet-le-Duc's *Dictionnaire*) shows the great extent of the buildings, and the numerous halls and domestic buildings erected round the courtyard, as well as the great towers boldly projected at the angles for the defence of the

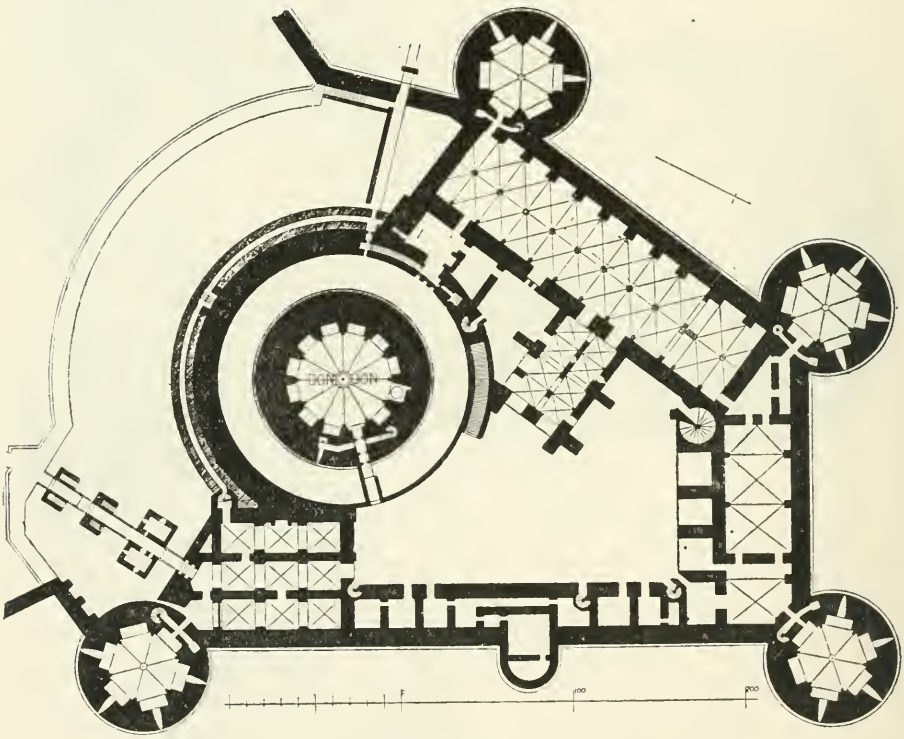


FIG. 31.—Château de Coucy. Plan.

curtains, everything being on the most gigantic scale (Fig. 31). Here the great round donjon does not profess to be a *residence*, it is simply a redoubt or last refuge in case of siege. This immense tower is about 95 feet in diameter, and 215 feet high, and the walls are 25 feet in thickness. It is surrounded by a separate ditch, with its chemise or enclosing wall, from which a moveable bridge leads to the entrance door. The interior contains one vast apartment or hall on each floor, and all were vaulted with groined arches, which had a circular aperture in the centre of the vault, through which materials of war might be hoisted to

the roof, where the defences were situated. There are only three stories in the height of the building, so that each floor is very lofty, the great hall being about 40 feet to the crown of the vault. The principal hall, which is on the second or highest floor, is of great size, with a raised gallery in the thickness of the wall all round, and could contain an assembled garrison of several hundred men. The openings in the walls are small till the parapet is reached. There we find a series of large stone corbels for carrying the hoards, and doors in the parapet for access to them. Above these the wall is crowned with a carved and foliated cornice.

We have here a good opportunity of examining the hoards or wooden defences already several times referred to. These were universally adopted in the castles of the thirteenth century. They consist of wooden boardings projected from the face of the parapet for the protection of the defenders, and in order to enable them the better to see and command the base of the curtains and towers. The boarding is carried by wooden beams run out from holes in the walls made to receive them, and these are supported and strutted by stays resting on wooden putlogs or stone corbels. The Tower of Jeanne d'Arc, at Rouen (Fig. 32), has been restored in imitation of old examples, and is armed with hoards as of old.

It is curious to trace the history of the use of wood in the construction and defences of mediæval castles. At first we find the whole of the erections in the castle, with its dependencies and enclosing palisade, constructed entirely of wood. The first change was the introduction of stone for the construction of the keep or chief stronghold, which was thus rendered secure against fire. Then it was found desirable to prevent the enclosing fortifications from being easily destroyed with fire, and a stone wall is substituted for the wooden palisade. Wooden defences are still adhered to, but they are now raised to the top of the walls in the form of hoards. At Aigues Mortes the apertures for the putlogs used for supporting the hoards are perfectly preserved. (See sketch.) By and by the engines of attack became powerful enough to throw missiles which destroyed these hoards, and fire-balls which set them on fire. It then became necessary to make the hoards of stone likewise; but this change is introduced very gradually. First stone corbels are used instead of wooden putlogs to support the wooden stays, then larger corbels are substituted for the wooden struts (as at Coucy), and finally the hoarding or parapet itself is built with stone. This last change did not take place till about the beginning of the fourteenth century.

The general adoption of vaulting in keeps arose from the same desire to avoid conflagration. Norman keeps were often floored entirely with wood. Sometimes the basement only was vaulted, the other floors being of wood. But now, with the introduction of the circular form of tower,

vaulting was simplified, and was adopted for every floor, so that keeps and towers thus treated were rendered practically fireproof.

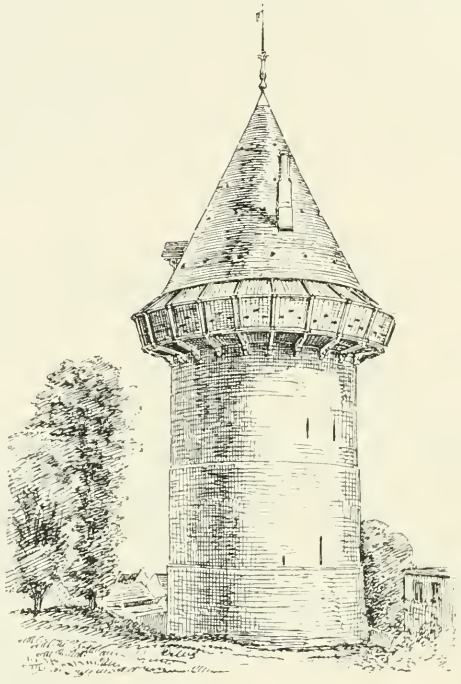


FIG. 32.—Tour de Jeanne d'Arc, Rouen.

Other improvements were rapidly introduced during the great building epoch of the thirteenth century, till at the close of the century we reach the point at which the castle and the palace are combined in one. We have seen above that the great enclosing walls of the enceinte contained originally, besides the keep, only offices hastily constructed in wood, and thrown into the centre of the court so as to allow the military engines to be used close to the curtains. These offices were subsequently built in stone against the walls, and gradually improved upon and joined to one another with covered corridors, till at last they were drawn together so as to form a compact dwelling.

Up to this point the castles are more works of military engineering than of architecture, but from the thirteenth century they become fine specimens of domestic architecture. Such castles as Coucy are magnificent residences as well as strong castles, provided with all the apartments necessary for the life of a nobleman living on his domains, and surrounded by his court and garrison.

At this period feudalism had reached its height in France. From

this time the power and riches of the great independent nobles were gradually lost and destroyed, and that of the Crown increased. St. Louis induced the nobles to engage in Crusades in order to occupy them and their warlike dependants. These expeditions resulted in great losses to the nobility, and a crippling of their power and resources. Hence few castles were built in France between 1240 and 1340.

Similar changes to those in France took place at this time in England in the construction of castles. In the reign of Henry III. few new castles were built, the country having been well supplied during the Norman times. The Norman castles were, however, added to and improved. The enceinte was enlarged, and the outworks strengthened. The palisades gave place to stone walls, and mural towers and gateways of great strength were added. These were sometimes concentric round the keep, and sometimes the keep was attached to the walls, either outer or central. During the thirteenth century manor-houses increased, and the castles became more domestic. The keep was abandoned and

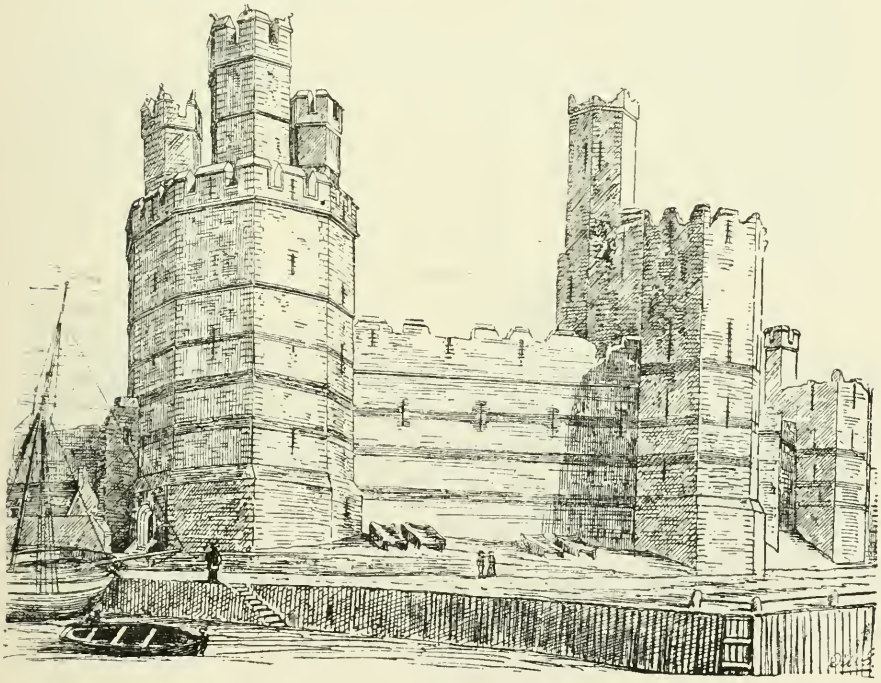


FIG. 33.—Carnarvon Castle from the North-West.

often allowed to become ruinous. The hall and chambers, chapel, etc. (as at the end of the twelfth century), were built in the inner bailey, and buildings of wood and plaster for the immediate requirements of large

establishments, were reared within the enceinte; but these buildings, formerly detached, were now connected with covered corridors. The end of the thirteenth century and part of the fourteenth is, however, marked by the erection of the great castles of the Edwardian period. These consist of lofty fortified walls enclosing one or more courtyards; there are generally two, called the outer and inner wards. These walls are flanked and strengthened by towers, generally round, and rising high above the curtains. These round towers were introduced about the middle of the Early English period. The keeps erected at this time are also frequently round, and strengthened with buttresses, like Conisborough. The door is usually on the first floor, and is entered by an external stair of stone or wood, or by a drawbridge, and is frequently defended by a portcullis. The battlements are provided at first with wooden hoards, and afterwards with stone corbels and parapets.

Carnarvon Castle (Fig. 33), in North Wales, is one of the finest of the Edwardian castles. It is of great extent, and in plan is shaped somewhat like an hour-glass, to suit the form of the site. The enceinte is of great height and strength, and contains three tiers of defences, viz., two galleries with loop-holes in the thickness of the walls, and the parapet walk above. The towers are here octagonal in form. The sketch shows the Eagle Tower, which is the largest, and seems to have been intended as a kind of redoubt. This castle was begun by Edward I. in 1283, and finished by Edward II. in 1322. The similar great castles of Conway, Beaumaris, Harlech, and Caerphilly were built about the same time to keep Wales in subjection.

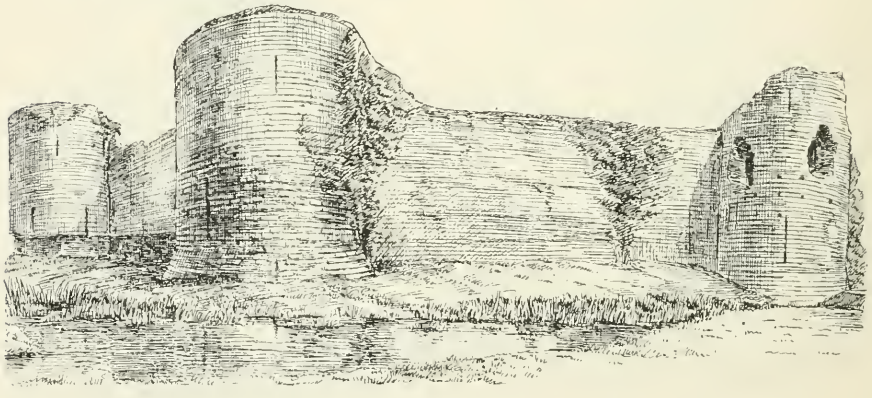


FIG. 34.—Pevensey Castle, Sussex.

Pevensey has already been referred to as exhibiting Roman work in its outer walls. But within the Roman walls a portion of the site was in Saxon times cut off by a deep ditch, and a motte erected within this defence.

Still later in the thirteenth century a mediæval wall of enceinte (Fig. 34) was erected within the moat, and strongly fortified with salient round towers, similar to those in use at this time in France, and not unlike some we shall meet with in Scotland.

The English round towers of this period are, however, greatly inferior, both in size and richness, to those of France. But much was done in England at this time to improve the comfort of the castles. These are generally of a smaller type than the French ones, and rather resemble fortified residences. The power of the sovereign, being sooner established in England than in France, may account for the comparative inferiority of the English castles; the royal fortresses, however, such as the Edwardian castles above referred to, were of great extent, but the nobles did not attempt to rival them.

Fireplaces become general in all the apartments, though these, being often only made of lath and plaster, are in many instances not now discoverable. The rooms are decorated with fresco painting. Glass is gradually introduced in the windows, although glass was not manufactured in England till the fifteenth century. There is a steady growth in wealth and luxury, and the lords and ladies forsake the gloomy donjons for the pleasanter apartments built round the walls. The manor-houses of this century also show an improvement on those of the twelfth century. They have now a larger number of chambers, as for instance at Charney, where the buildings form three sides of a quadrangle, and are two stories in height, the upper floor being habitable apartments, and the lower floor cellars, etc. The entrance to the upper floor was by an outside stair, usually of wood, with penthouse roof. Stokesay, Shropshire, is an excellent example of the fortified manor of this period (about 1300), also Somerton Castle, Lincolnshire, which belonged to Anthony de Bec (licensed 1281), and presents a good example of the round towers of the period. (See Parker.) The mouldings used give some indication of the date of the buildings, but plain splays are often employed. In the early English castles the buttresses are bold, and the nook-shafts, ribs of the groins, etc., indicate the same date as similar features of ecclesiastical architecture.

During the course of the fourteenth century, military and domestic architecture made still further progress.

As the science of attack and defence advanced, it was found that the old system of multiplying and complicating the difficulties of access, notwithstanding the great skill displayed in arranging the details of the defence, was a mistake in principle. The works proved too crowded; there was not sufficient space for the defenders at the critical points; the obstacles accumulated in a small space were found to do more harm than good, by preventing a sufficient number of men being brought into action at once; and these obstacles, when taken, gave shelter and

protection to the besiegers. For instance, when the enceinte was taken, and the defenders had to retire for safety to the keep, they were unable with sufficient rapidity to climb the narrow ladder leading to the lofty door, and were exposed to be cut off.

It was thus found necessary to abandon the system of isolated defences. The garrison was no longer divided up into independent detachments, each occupying its own post; the whole were united under one central command. Now, therefore, every facility was given for moving men from one part of the works to another, and the outer fortifications strengthened by every means the architect's ingenuity could devise. A smaller garrison of picked men was then found more suitable than the large garrisons of earlier times, composed of untrained vassals. The donjon was still retained, but it was now constructed more in the form of a dwelling than of a redoubt, and relied for security not so much on its own strength of construction, as on the numerous defences which surrounded it. The outer works adjoining the ditches were strengthened and provided with crenelated walls and rampart walks. The curtains are heightened and furnished with two stages of defences; first, the projecting parapet with machicolations and loops, crowned by a second parapet with embrasures and loop-holes.

In the case of the towers, these stories of defence are increased to three, and even five stages in height.

The extra height of the curtains guarded against escalade, and a broad talus or ramp at the base not only strengthened the wall, but saved it from the attack of the miner by keeping the assailants well out, and exposing them to the missiles from above. There were no openings in the lower part of the main walls, and the various towers and parapets were so planned as to cover and protect one another. The gateways were of course defended in a special manner, having miniature castles erected beyond the ditch to cover the approach.

Behind these extensive works a skilful commander with a small garrison could defy the attack of a large army. The defence now had the better of the attack. But this pre-eminence did not last long, and the tables were soon to be turned by the introduction of gunpowder in the attack of strong places. This took place about the beginning of the fifteenth century.

While the above changes were going on in the defences of the castles, considerable modifications were also gradually introduced into the habitations within the walls. During the fourteenth century chivalry advanced and manners softened. The apartments were no longer limited to the hall, with solar and kitchen, and a few other rooms. Great suites of halls, reception rooms, private rooms, bedrooms, etc., were now introduced.

The Castle of Pierrefonds, built by the Duc d'Orleans about 1400, is a very fine example of the castle of the period, presenting a complete representation of the most powerful fortification, combined with

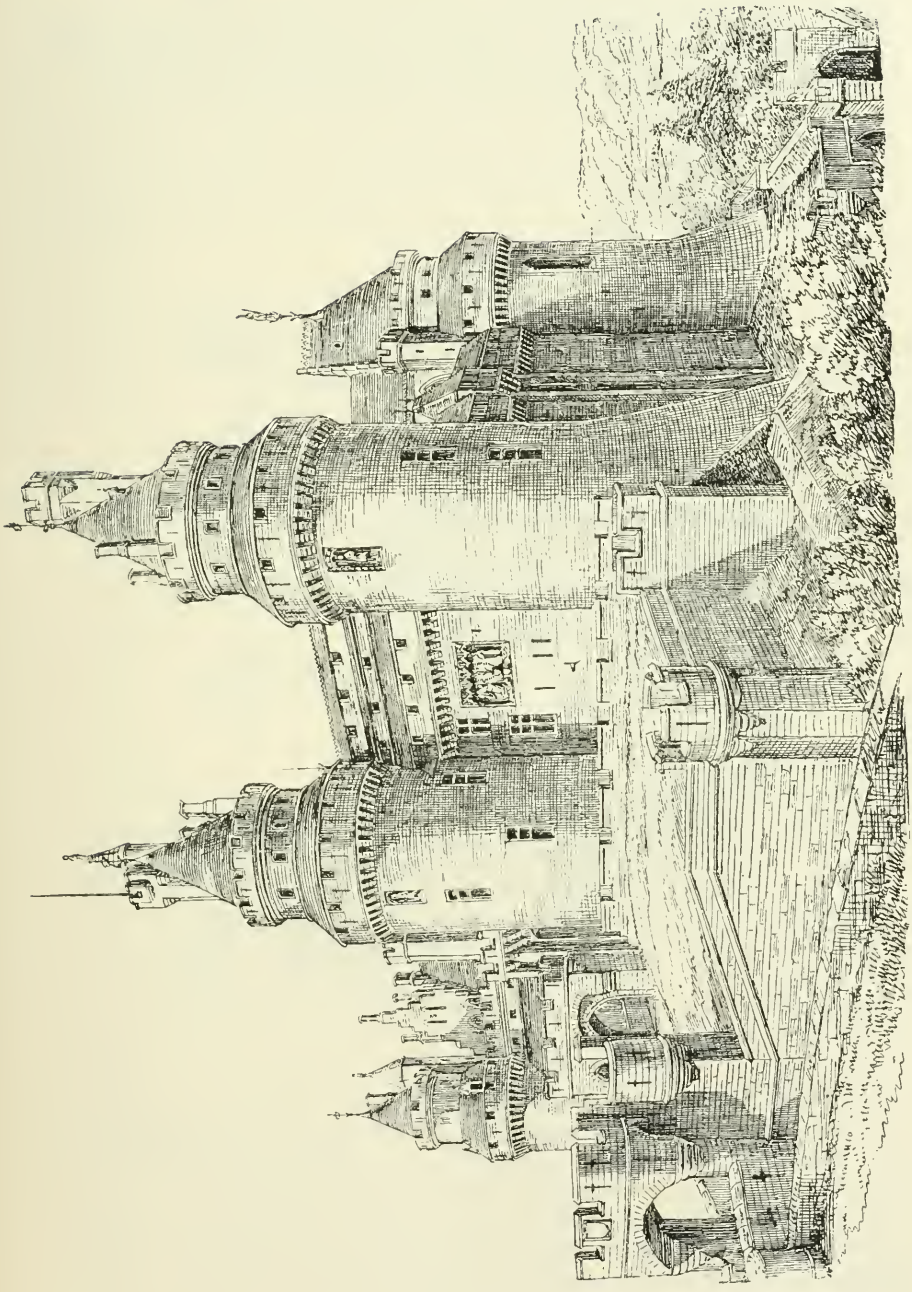


Fig. 35.—Château de Pierrefonds. Entrance Front.

the amenities of a noble mansion. The plan of this castle (Fig. 37, from M. Viollet-le-Duc's *Dictionnaire*), together with the sketches (Figs. 35, 36), will explain the arrangements and defences of this splendid building, which has within recent years been admirably restored by M. Viollet-le-Duc.

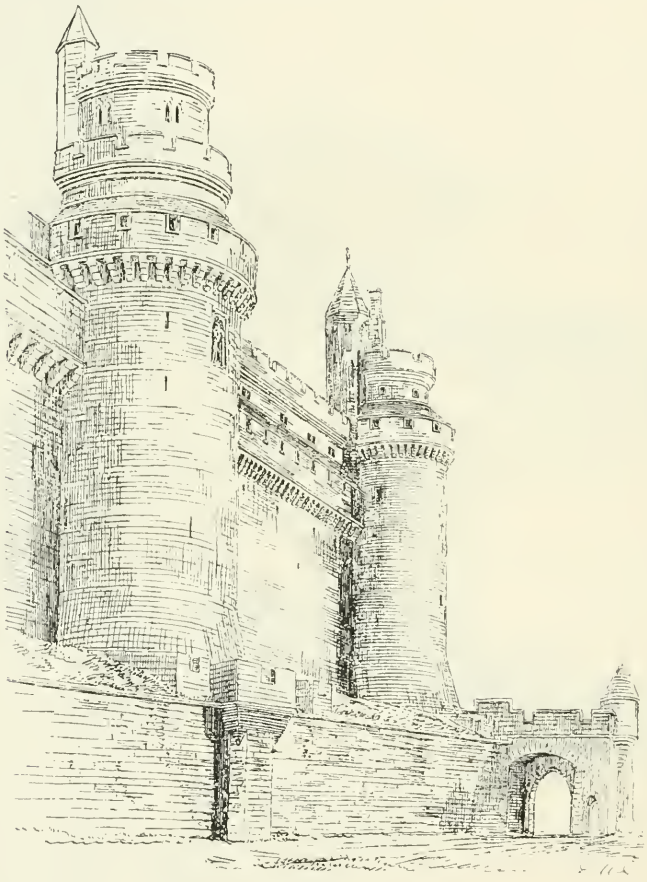


FIG. 36.—Château de Pierrefonds. West Side.

The entrance gateway, provided with drawbridge, etc., is covered by an enormous round tower forming part of the donjon or keep. This is no longer a simple tower or redoubt, as at Coucy, but contains an extensive suite of apartments forming the residence of the lord and his family. The entrance is by a handsome perron, or open staircase, and the rooms are all decorated with painting and carved work. Along the west and north sides of the courtyard there is a series of splendid reception rooms, hall of justice, etc., and on the east side the chapel and a small courtyard

through which provisions, etc., were hoisted into the castle by a postern, without the necessity of admitting strangers into the inner ward. This courtyard also served to isolate the keep from the rest of the castle.

The towers are all of great height and strength. They are solid below, and provided with several tiers of defences at the summit.

The view of the south front (Fig. 35) gives a general idea of the aspect of the castle, while the sketch of part of the west side shows the various stages of defences with which the towers and curtains are armed.

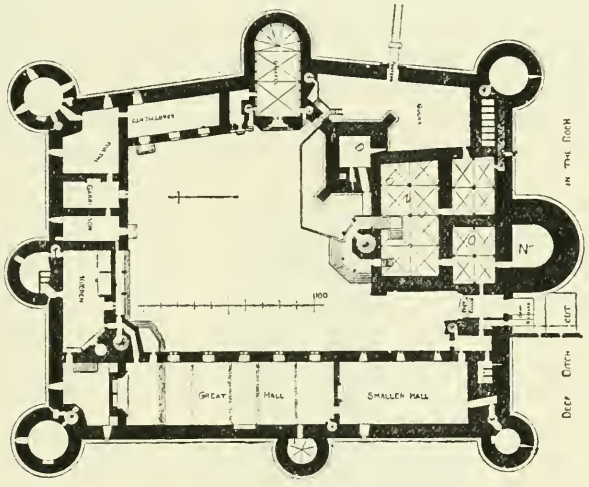


Fig. 37.—Château de Pierrefonds. Ground-Plan.

During the fourteenth century the Castellated and Domestic Architecture of England took a somewhat different course from that of France. Instead of devoting their attention to the perfecting of the defences, the English architects were chiefly intent on still further improving the convenience and comfort of the interior accommodation. The halls were increased in size and in number—there being frequently a great hall and a little hall, each having its separate kitchen and offices. The private rooms were also increased in number and importance. The lord had no longer only one solar, which acted as private room for himself and family. There were a lord's room and a lady's room, family bedroom and guests' apartments. Bath-rooms were also in use. These apartments were placed in wings attached to the hall. Parlours and private dining-rooms were also now introduced, and large rooms for wardrobes. The chapel was also an important chamber, and had peculiar arrangements. The chancel was lofty, and was provided with a large east window. But connected with it there was sometimes a nave or room of two stories in the height of the chancel—the upper part, or "oriel," being used by the lord and his family, and the lower part by the domestics. The hall was the

prominent feature in every dwelling, and it was then arranged exactly as it has continued to be till the present day in the halls of the various Colleges and Inns of Court. It had a raised dais at one end, with lofty oriel window, and communicated with the lord's apartments and the chapel. At the other end was the screen, made of wood, which formed the passage from the entrance, and over which was situated the minstrels' gallery. The screen was frequently richly carved and ornamented. At the opposite side of the screen from the hall were generally three doors —the central one leading to the kitchen, while the side doors led, one to the pantry, the other to the buttery. In the screens was placed a lavatory for washing hands, and sometimes also a stone sideboard, both of which were often highly enriched.

The dais and private rooms were sometimes adorned with tapestry hangings, which were introduced in the fourteenth century.

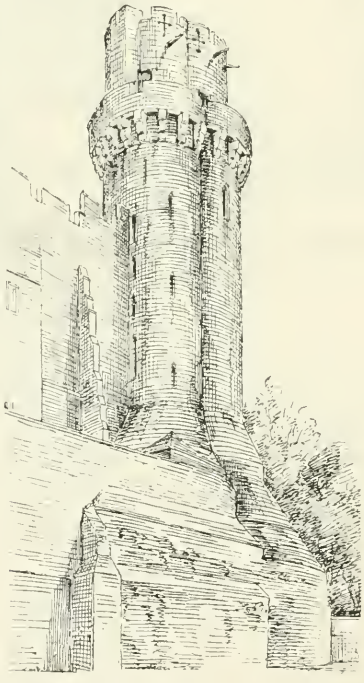


FIG. 38.—Warwick Castle.

The hall was generally heated by a large hearth in the centre, the smoke escaping by the louvre in the roof. The hall was either on the ground floor or first floor (with cellars under), but always had an open timber roof. It had either a porch at the entrance or an outside stair, as required, the latter having a penthouse roof.

The detached kitchens, bakehouses, brewhouses, etc., beautifully constructed in stone, which still exist at Glastonbury, Stanton Harcourt, and elsewhere, are a remnant of the old fashion of building all the offices apart from the main building.

The Castle of Warwick (Fig. 38), rebuilt by Thomas Beauchamp, Earl of Warwick, in 1360-69, illustrates the dispositions of the various halls and other apartments at that time. (See plans in Parker.) We have here the great hall and the little hall, a separate dining-room and drawing-room, private rooms, numerous bedrooms, etc. The enceinte is fortified with two great towers at the angles, called Cæsar's Tower and Guy's Tower, with a large gatehouse between, provided with a barbican or outer fortification. The sketch of Cæsar's Tower (Fig. 38) shows that the English Castellated Architecture of the period was but little inferior to that of France, and forms a good companion picture to the view of the Western Towers of Pierrefonds.

Bodiam Castle, Sussex (Fig. 39), is also a good example of an English castle of the end of the fourteenth century, the licence to build it having been granted in 1385. The building consists of a quadrangle 152 feet by 138 feet over the walls, which rise directly from the water of the moat which surrounds it. This has been formed artificially, by excavation on one side and damming up on the other, and is still in good preservation. The sketch shows the north and east fronts, with the principal entrance to the castle in the centre of the former, approached by a causeway with drawbridge and barbican, the remains of which are visible. The curtain walls are 40·6 high, and the towers are 56 feet high, and are provided with stone parapets and machicolations.

The entrance gateway is finely vaulted, and has the usual portcullis and gates. The hall and kitchen occupy the south side of the quadrangle; the passage through the "screens," which has three service doors, leads to a postern opening on the moat. Everything here betokens a castle built for strength. There are few and small openings to the exterior, all the principal windows being to the courtyard; but, although strong, it is manifestly very inferior as a fortress to such buildings as Pierrefonds. The chapel and private rooms occupied the east side, and barracks and offices the west side.

Manor-houses were frequently erected in the form of a quadrangle, having the hall and principal apartments on one side, stables and offices on other two sides, and the gatehouse on the fourth side. They are invariably surrounded with a moat, and protected by a drawbridge and portcullis. The wings sometimes form towers of three or four stories in height. The outbuildings are still frequently of wood. Every house of any importance is fortified, so that it is difficult to draw the line between the house and the castle or fortress, the latter having always habitable parts, and the former being strongly fortified.

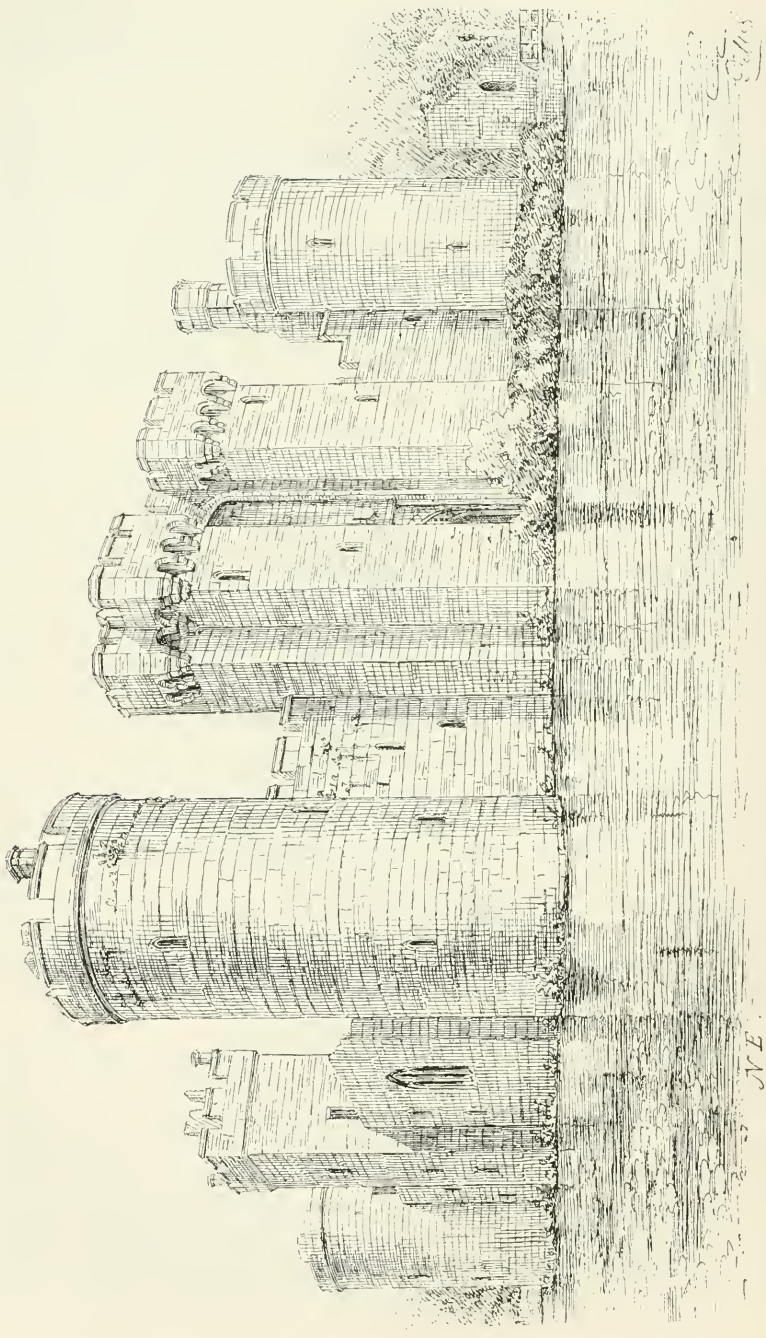


FIG. 39.—Bodiam Castle. View of Entrance Front.

Many manors had towers attached to them, both for security and as adding dignity, in the same way as the towns marked their rank and freedom by their belfries.

Another class of manors were built in the form of a tower, generally of three stories in height, and with windows on all sides. These had turrets at the angles, which contained bedrooms, offices, closets, and staircases. They also had a wall or palisade enclosing a court, surrounded by a moat, with gatehouse, etc.

In disturbed districts these tower houses had the ground floor vaulted. The hall and rooms above were entered by an outside stair to the first floor, as in the older keeps. The guard-room and prison were generally on the ground floor.

Although gunpowder had been used to a considerable extent during the fourteenth century, it was not till the fifteenth century that it was made available in the form of siege artillery. About the year 1400 cannons were employed chiefly in the field against troops. By 1430 the Royal armies had begun to use cannon against fortresses, and, by the middle of the century, it was recognised as a principle in the construction of castles that they should be built so as to resist artillery. But the feudal nobles were hard to convince that their magnificent castles, which had been reared at so much expense and with so much care, were not impregnable; and they still clung to the old and cherished forms of lofty towers and curtains, crowned with parapets and machicolations.

For some time efforts were made to defend castles against artillery by the erection of outworks, like barbicans, in front of the gates. These were armed with guns, the loopholes being pierced at the base of the walls. Outworks were also constructed in advance of the walls, so as to keep the guns of the besiegers at a distance, and so save the walls; but it was soon found, as the science of artillery improved, that these outworks were of no use, and that the walls could be battered by guns from a much greater distance.

Attempts were also made to arm the towers and walls with cannons. Flat platforms were substituted for the old conical roofs of the towers, and cannons were placed upon them; but the towers were too weak and too small in diameter for guns of any useful size, and the plunging fire from such a height did little harm.

At length, towards the end of the fifteenth century, large siege-guns came into use, and then the nobles had, however unwillingly, to accept the position, and admit themselves convinced that their castles could no longer resist this new means of attack. It now became clear that henceforward fortresses must be large, with extended works, too great for single individuals to carry out, and that such constructions must therefore be national, and undertaken by Royalty only.

Thus it came about that the nobility, finding their castles useless for

defence, gradually did away with the ponderous and gloomy walls which surrounded them, and opened them up for their own pleasure and comfort.

At this time also many of the French nobles who had been engaged in the wars in Italy had there seen and appreciated the delightful open villas of that country, and on their return home to France they hastened to make their own castles as like them as possible. They threw down the curtain walls, and erected convenient domestic buildings instead, with large windows, commanding the finest views over the country, without reference to defensive requirements.

But the old habits and traditions were not easily overcome, and it was not till the days of Louis XIV. that the symmetrical Italian façade completely displaced the old mediæval style. For long the plan and distribution of the apartments remained perfectly French, although the details began gradually to show signs of an Italian feeling. The castles still preserved their complicated entrances, with moat, drawbridges, flanking towers, projecting bartizans, machicolations, etc.

But these were not built for the purpose of resisting a siege, but rather in imitation of the features of the feudal fortress, and as symbols of the power and importance which had once belonged to these fortifications.

Hence it resulted that these features, no longer employed for their old uses, but merely for ornament, came to be fancifully disposed, and infinitely multiplied. The covered passages, for instance, formerly required for the service of the machicolations, were still continued, but only used as passages of communication to the various rooms. The great corbels, which formerly carried the overhanging parapet, now only supported an ornamental cornice, and were therefore soon broken up into small and fanciful mouldings. The parapets themselves became mere decorative features, the eaves of the roof being raised to the top of them, and so with all the other features of the mediæval castle. These Renaissance castles are characteristic of the early part of the sixteenth century. They were generally planned with a chief or inner courtyard, which contained the hall, with the domestic apartments of the owner, kitchen, offices, etc., and an outer court for the dependencies, and frequently an enclosed garden.

The mansions of this period are still single tenements, *i.e.* the rooms extend the full width of the building, with windows on each side, and the apartments enter through one another. It was not till the seventeenth century that double blocks were introduced, with rooms lighted from one side only, and with corridors giving access to the separate apartments. Symmetry and regularity of design were arrived at early in the sixteenth century.

The stage had then been reached of merely playing at building feudal

castles. Francis I. set the example. He demolished the great donjon of the Louvre erected by Philip Augustus, and built a Renaissance courtyard instead. He also built the celebrated Château de Chambord, which is a perfect parody of a French castle. It has all the parts complete,—a great donjon situated next the wall, towers at the angles, turnpike stairs, secret passages, moat, etc. But these features resemble those of the feudal fortress only in name, without any of the characteristics which rendered the latter real and noble.

Efforts were now made to alter the old feudal towers, so as to bring them into harmony with the more peaceful ideas of the times, by enlarging the windows, in order to render the apartments more cheerful and habitable. But the great towers of the old castles were so solidly built that enlarged openings could with difficulty be cut through the masonry. This led to an opening in the old walls being slapped from top to bottom, as the easiest mode of getting enlarged window spaces. A series of windows was then introduced, filling up the gap with new work from top to bottom, and this feature afterwards became a motive for the decoration of other similar new buildings. The old machicolations were also imitated in the new cornices, and throughout the ornament there is a curious mixture of the old castellated details with the new Italian decorations.

Very many fine specimens of the castles of this period (fifteenth and sixteenth centuries) exist in almost every part of France, and are easily distinguished by their numerous turrets and pointed roofs, and by the late Gothic details with which they are ornamented. The banks of the Loire are especially rich in fine examples of fifteenth-century work, such as the Castles of Blois, Amboise, etc.

We give two views of Montsabert (Figs. 40 and 41), one of the castles from the Loire country, which shows nearly all the leading features above referred to. It seems to occupy the site of an older castle, the enceinte walls, ditch, etc., of which have now almost completely disappeared. Some of the towers are probably ancient, but they have now assumed a more modern guise, being pierced with large windows, and having lost their frowning parapets. The machicolations, which are ornamented, and may have been at one time for use, now merely carry a false parapet, on which rests the roof, with dormer windows running up into it, thus showing that the space within formerly used for the service of the defence is now thrown into bedrooms. The front courtyard has no enclosing wall, and the door, no longer jealously guarded with portcullis and drawbridge, is accessible to every visitor.

The details are generally late Gothic of the fifteenth century, but these have been superseded in the dormers and doorway with later Renaissance work. We have selected Montsabert for illustration because we have special reasons for referring to it hereafter in connection with Scotch Architecture. We likewise give, for a similar reason, a view of the

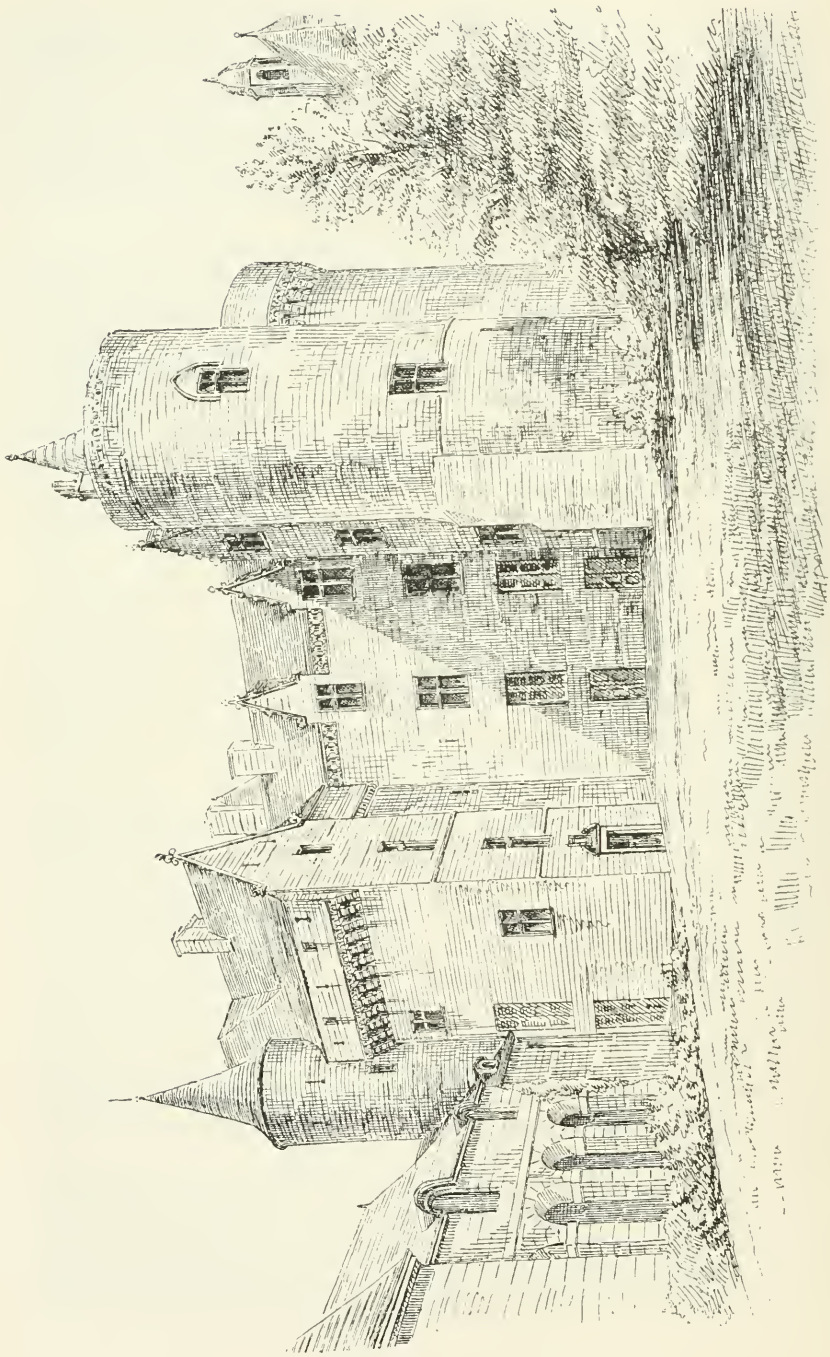


FIG. 40.—Château de Montsabert from the West.

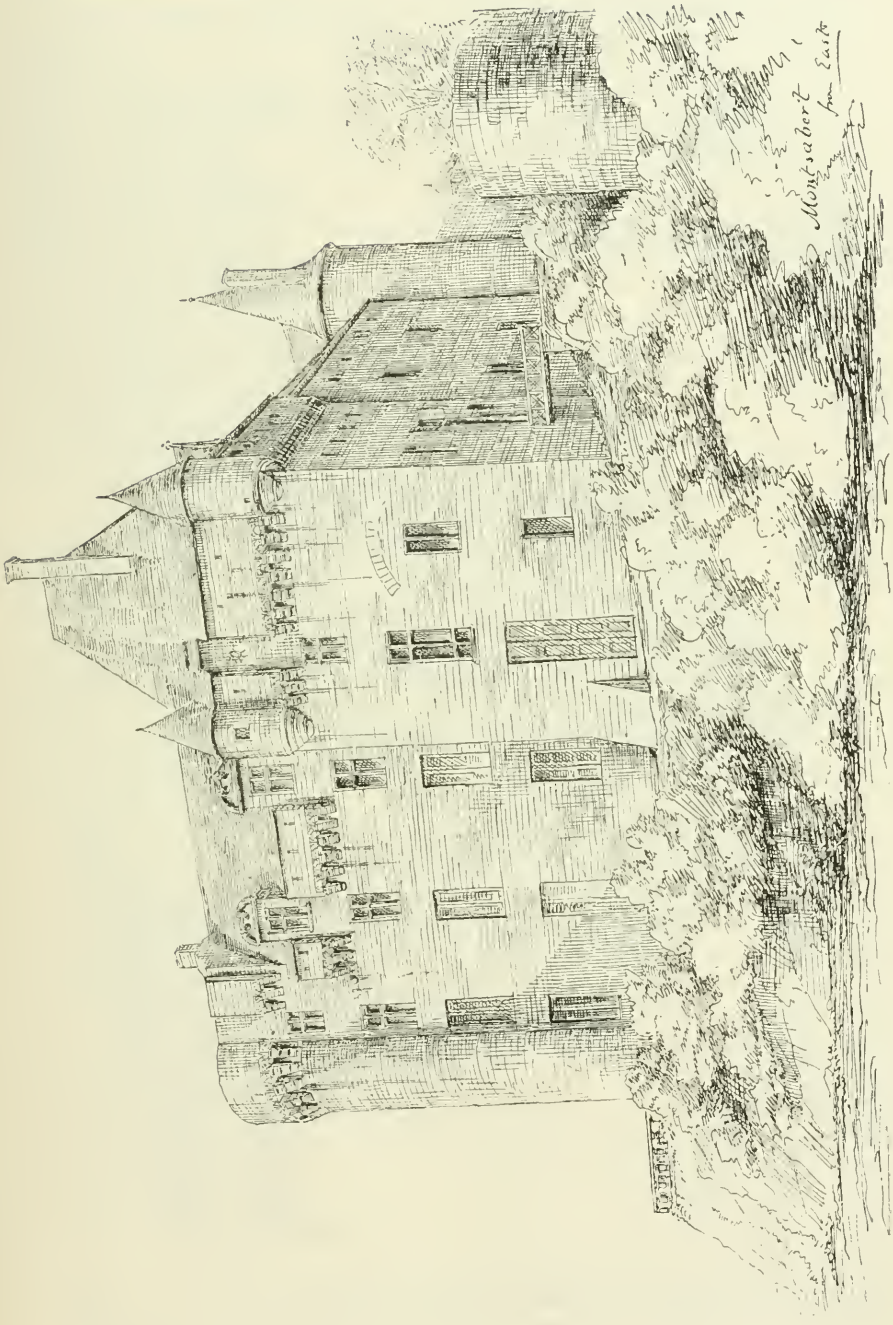


FIG. 41.—Château de Monstabert from the East.

so-called "House of Francis I." in the "Cours la Reine," Paris (Fig. 42).

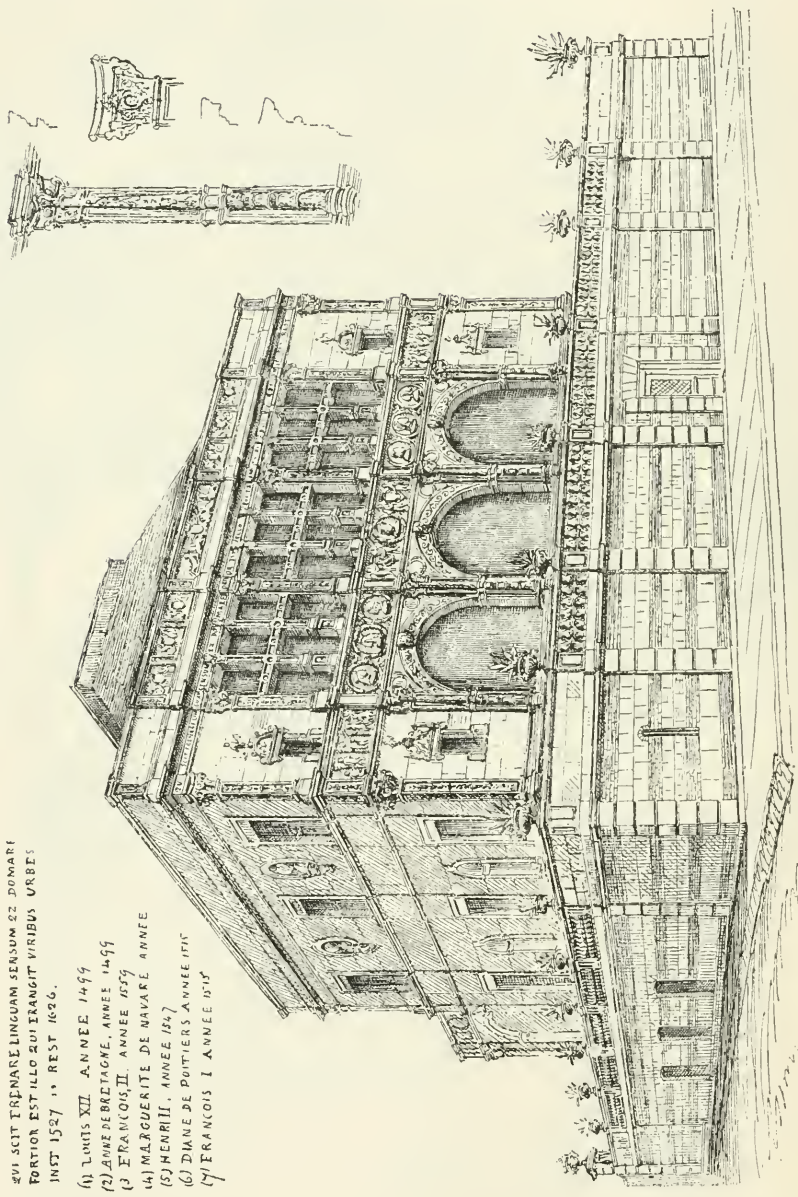

#VI SCIT FRENARE LINGUAM SENSUM QZ DOMARE
PORTIOR EST ILLO QUI FRANGIT VIRIBUS URBES
INST 1527 ·· REST 1626.
(1) LOUIS XII. ANNEE 1499
(2) ANNE DE BRETAGNE, ANNEE 1499
(3) FRANÇOIS II. ANNEE 1559
(4) MARGUERITE DE NAVARE ANNEE
(5) HENRI II. ANNEE 154
(6) DIANE DE POITIERS ANNEE 1551
(7) FRANÇOIS I ANNEE 1515

FIG. 42 — House of Francis I., Paris.

This building may be taken as an excellent example of the later phase of mediæval domestic architecture in France. The house was originally

erected in the neighbourhood of Fontainebleau in 1527, and was taken down and re-erected on its present site in 1626, in terms of the inscription which it bears. We here see a design in which perfect symmetry prevails, and although the general forms of the windows, niches, canopies, parapets, etc., are Gothic, the details are completely Renaissance in design. In the larger drawing of the window-shafts, we see some remains of the late Gothic feature of "interpenetration" of mouldings and caps, mixed up with the Renaissance features of baluster-shaped shafts and caps with wreaths and other classic details.

The heads of kings and queens (which in this case bear the names and dates of the originals) are very characteristic ornaments of the period.

There is scarcely a single building of this time, especially amongst the numerous examples in the country of the Loire, which is not adorned with the heads of the Roman Cæsars or of the Kings of France, a feature which we shall afterwards see King James v. of Scotland imported into his country along with his Queen, Madelaine, daughter of Francis i.

In England, as we have observed, the process of conversion of castles into dwelling-houses had begun much sooner than in France, and in the fifteenth century we may say that the process was completed. Manners and the mode of living had so entirely changed, that a large hall was no longer necessary. The nation had made great progress, and commerce and wealth had greatly increased. The towns had risen in importance, and many of the wealthy merchants vied with the nobles in their state. Guilds had also grown up among the tradesmen, and many of the trades which used to be carried on within the walls of the castle were now practised by the burghers in the towns. The feudal lord thus no longer required or maintained the same number of retainers and tradesmen within his castle, and as his state and retinue declined, the hall declined with them.

The introduction of gunpowder further materially hastened the process of conversion of the castle into the mansion. But in England, as in France, the old forms and features were long retained as ornaments after their original use was forgotten and abandoned.

Towers and battlements, moats, drawbridges, and other early features, still continued to be erected, although the residential character of the houses was developed. Of these castles we have a fine example in Hurstmonceaux, Sussex (Fig. 43), which combines the castellated features of moat and loopholes, crenelated towers and frowning gateway, with the large windows and oriels and extended accommodation of the later mansions.

But these castellated features are merely for show, not for use. The only really defensive features of this mansion are the moat (now drained) and the shot-holes at the entrance gateway. The interior is unfortunately so much destroyed that the plan cannot now be distinctly

made out. The castle was begun in 1420, but does not seem to have

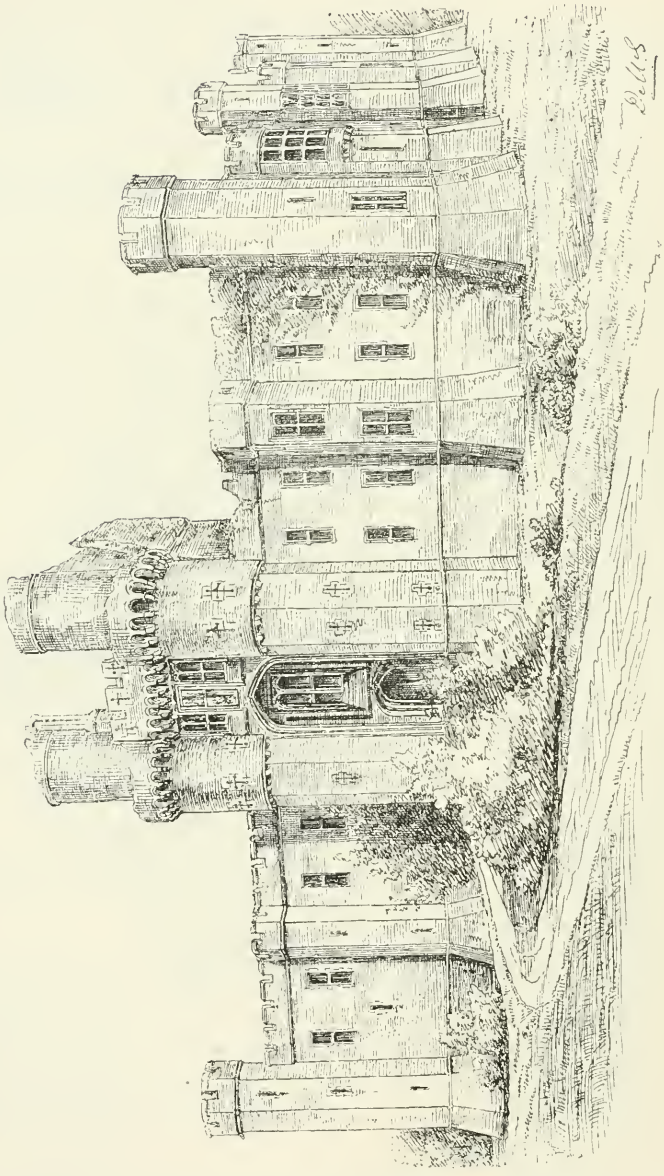


FIG. 43.—Hurstmonceaux Castle, Sussex.

been completed till 1480. It comprised three courtyards, and the domestic arrangements seem to have been of a very advanced description.

On the Borders of Scotland and Wales, where the country was dis-

turbed, the old fortified plan of castles was still adhered to. The pele towers also retained their old form, which was an imitation of the Norman keep. This form of tower had been preserved from the twelfth century, through all the changes which had taken place, as the simplest and most suitable for the fortified house or small pele. These towers were, in fact, the manor-houses of the Border districts. The Norman ornaments, such as the billet, cable, etc., used in these peles, still further connect them with the Norman keeps. It should, however, be remembered that in all late Gothic work there is a tendency to revert to Norman ornament. The billet and zigzag, for instance, are often employed as ornaments in the barge-boards of the Elizabethan period. The pele towers, like the Norman keeps, had usually their entrance on the first floor, or by a narrow newel stair from the ground floor. The latter was always vaulted (as a precaution against fire), and formed a store-place, or a stable, or a place of safety for cattle. The first floor contained the hall or common room, and the principal or private room was on the top floor. It was not till the seventeenth century that the Border pele towers were abandoned, when they were found to be defenceless against artillery.

Some houses built in the tower style are much more ornamental than usual, as Tattershall, in Lincolnshire, for instance (see Parker), where we have a tower-built house crowned with machicolis, parapets, and turrets, and surrounded with a moat; while its large windows and other details show that it was not designed for serious warfare, although, no doubt, capable of resisting a sudden attack.

In the more peaceful parts of the country, however, the manors are usually of the ordinary dwelling-house form, viz., built round a quadrangle, of which the hall and its pertinents formed one side, with the offices and chambers disposed round two of the other sides, and the gatehouse in the side opposite the hall. Sometimes there is a kitchen court behind entering through the screens. At other times the kitchen and offices are on the ground floor, and the principal rooms above. The outer court was often the farmyard, with the necessary farm-buildings around. From this the entrance to the inner court was through a gateway, but the drawbridge and portcullis were dispensed with.

Dining in hall was greatly disused in the fifteenth century (notwithstanding ordinances against the abandonment of this ancient custom), and we find instances where the old dais is cut off from the hall by a partition, and thus converted into a private dining-room. Private dining-rooms and drawing-rooms now became usual, and all the apartments were multiplied, both at the master's and servants' end of the hall; for the practice of the servants sleeping in the hall was abandoned (except when the house was very crowded), and the servants were provided with distinct apartments.

Besides the private dining-rooms and drawing-rooms, there were a study for the lord and a boudoir for the lady, a private chapel, and numerous bedrooms. These were frequently arranged in a tower adjoining the hall. The dormitory was often in the roof, and sometimes over the hall.

The apartments thus gradually increased in number and importance, till, in the time of Elizabeth, they became as numerous and varied as they are now.

The decoration of the interior also progressed rapidly. The arras was replaced, in the time of Henry VIII., with wainscot panelling, frequently carved with the linen pattern. This covered the lower part of the walls, while above it was pargeted with plaster, ornamented with the heads of the Cæsars and similar figures, while Italian details and ornaments gradually crept in. Inscriptions, texts of Scripture, mottoes, etc., were of frequent use in the fifteenth century. At this date glass for windows was still rare in houses. Henry VIII. had his casements carried about with him, from one manor to another, and the windows of the different houses were made of the same size, so as to suit the glass casements.

Ceilings had usually moulded wooden beams and ribs, in square panels, in the fifteenth century, but plaster was gradually introduced in Henry VIII.'s time, and its use was greatly extended under Elizabeth.

Staircases were enlarged, and adorned with curiously carved banisters and pedestals.

The passages were still generally in the thickness of the wall, with doors entering from the window recesses; but there were sometimes galleries formed outside, like cloisters, to give access to the different apartments. These galleries form a fine and characteristic feature of the Elizabethan period.

The bow window was introduced about the end of the fourteenth century, and soon became a very favourite and characteristic feature of English Architecture.

Fireplaces were usual in all the apartments, but in the hall the reredos or brazier in the centre was still common, and in many halls continued in use till the present century.

Gradually the castellated features gave way, as they had done in France, to the encroachments of the Italian details, until, in the splendid mansions of Elizabeth's time, the Renaissance style completely prevailed in all the ornamental features of the design. But many of the characteristic portions of the old plans still held their own. There are many specimens still in existence of noble halls with open timber roofs, and fine galleries with the distinctive bow windows of English Architecture.

These and similar features of the old style lingered through the reigns of the Stewarts, and it was not till the end of the seventeenth century that they were entirely swamped by the cold symmetry of the Classic style.

THE CASTELLATED AND DOMESTIC ARCHITECTURE OF SCOTLAND.

FIRST PERIOD—1200-1300.

The history of our Scottish Castellated and Domestic Architecture is, in its main features, somewhat similar to that of France and England, although to a considerable extent modified by the more unsettled and less prosperous condition of the country. This, however, had the effect of introducing and developing some varieties of style, which give a distinctly native and picturesque character to the later periods of our Domestic Architecture.

Examples of the Early Castellated Architecture of Scotland are, unfortunately, by no means so complete or so abundant as those of France and England.

There can be no doubt that the earliest fortifications in Scotland were constructed with earthen mounds and wooden palisades, like those of France and England. Of these primitive fortresses numerous remains are to be found in every part of the country. They are usually situated on the tops of the rounded knolls or hills which abound almost everywhere over the land, those sites being selected which are composed of comparatively soft materials, easily dug into for the purpose of forming the ditches and ramparts. Of these ditches and mounds there are usually several rings, extending round the sides of the hill. We shall meet with several instances, as we proceed, in which these early works have been made available in connection with later castles.

Artificial "mottes" also exist in various places, but these are supposed to have been for the administration of justice rather than for defence.

Another class of fortification, very common in the north, and peculiar to Scotland, is the Broch or Burgh. This consists of a round wall enclosing an open court. The wall is always of great thickness, and is built with dry rubble stones, without mortar or cement of any kind. A straight staircase and several small apartments are formed in the thickness of the wall. The entrance door is low and narrow, and was evidently so built for defence. From the door a narrow passage leads through the wall, frequently with a guard-room on one side. The origin and date of the

brochs is unknown, but they are supposed to be the work of the native Celts. They have probably some affinity with the early dry-stone churches and cells of Ireland. These brochs may perhaps be the northern form of the wooden burghs, which the Norsemen in France and England built on the top of their "mottes;" but in Scotland, where stone abounded, they were constructed in stone instead of timber. If so, and if the brochs represent the usual form of the early castles of Scotland, it might be supposed that they would have a material influence on the subsequent forms of construction. We have, however, not been able to trace any connection between them and the arrangements of the earliest castles built with stone and lime. But in the towers of a later date, as we shall see, the tendency to hollow out the walls with innumerable small apartments is carried to an extreme length, which may possibly be a tradition from these ancient brochs. It is probable that the building of castles with stone and lime was introduced into Scotland, as into England, by the Normans. During the eleventh and twelfth centuries the pressure of the Normans in England drove the Saxon nobility northwards, and these were followed by numerous Normans, who were welcomed at the Scottish Court, and obtained large domains in the country. It was no doubt the policy of these adventurers to establish themselves in the same position as the native chiefs who had to make way for them. They would thus naturally take possession of such strongholds as they found, which probably consisted of an enclosing wall on some naturally strong site, or of an area surrounded with a ditch and palisaded mound, with a natural or artificial height within on which the dwelling of the chief, usually built in wood, would be placed. This course was often adopted by the Normans in England, and it may be remarked that their position in England under the Confessor is very similar to their position in Scotland in the twelfth century. Many Normans, encouraged by the Confessor, had settled in England, but it was not till after the Conquest that the Normans took root in the country and began to build castles in their own style. So likewise in Scotland the Norman nobles do not appear to have built castles in their own style for at least a century after their first arrival.

But whatever the early castles of the Norman Period in Scotland were, they have all disappeared. They have probably for the most part been remodelled into the castles of a later period, or have been demolished in the frequent sieges of those stormy times. But although no original Norman castles are to be found in Scotland, the rectangular keeps of the Normans have formed the model after which most of our Scotch castles have been constructed. During the three or four centuries succeeding the War of Independence, there is a constant succession of castles built upon the Norman model, which present us with a faithful likeness of their originals.

This was also the case in the north of England: wherever and when-

ever a strong tower was required, the plan of the old Norman keep was adopted.

There is ample historical evidence of the construction of castles in Scotland in the twelfth century. Alexander I. and David I. are well known as great church-builders, and it is on record that they also erected many royal castles. The great feudatories also followed their example, and erected castles on their domains. It is most likely, however, that these consisted chiefly of earthworks, defended with wooden palisades or rough walls of uncemented stone-work.

It is, no doubt, remarkable that while many fine specimens of ecclesiastical architecture of the twelfth century remain, there is not one example of the civil or military architecture of the period to be found in the country. On the other hand, it must be kept in mind that the Norman walls were of such solid construction that, had any been built in Scotland at that period, they would probably have still survived.

The thirteenth century was an exceptionally prosperous one in Scotland. Alexanders II. and III., whose reigns were long and comparatively peaceful, being little engaged in war with England, had leisure to establish a settled government in their kingdom. They also encouraged Englishmen and Normans to settle in Scotland; and the trade of the country, both with England and the Continent, seems to have been considerable. Hill Burton is of opinion that the country was comparatively wealthy at this period, and more prosperous than it ever was till after the union with England.

It is, therefore, quite natural that some signs of this unwonted prosperity should be traceable in the castles of the nobles of the period, and we shall see that this was the case.

While friendly with the south, Alexanders II. and III. were greatly engaged in contests in the north and in the western islands, which they were desirous to rescue from the Norsemen. Alexander II. died at Kerrara in 1249, while engaged in one of these expeditions.

In order to secure the dominions thus reclaimed, castles were built. Thus we find that William the Lion built the two castles of Edindour and Dunskaith, near Cromarty, in 1179, for repressing insurrection in Ross. Urquhart Castle, on Loch Ness, was also originally a royal castle. Dunstaffnage and Inverlochy, which still exist, belong to the thirteenth century,—having the great walls of enceinte strengthened with round towers, which distinguish that period.

Professor Cosmo Innes, in his *Scotland in the Middle Ages*, mentions the following fortresses as existing in the thirteenth century, viz., Duffus and Bocharm in Moray; Ruthven and Lochindorb in Badenoch; Strathbolgie, Fyvie, Inverurie, Kildrummie, and others in Aberdeenshire; Kincardine, Brechin, Redcastle, Forfar, Glammis, Leuchars, Craill, St. Andrews, on the east coast; Dumbarton, Bothwell, Douglas, Rothesay,

Turnberry, in the west ; Edinburgh, Stirling, Linlithgow, Dunbar, Yester, Roxburgh, Jedburgh, Lamberton, Morton, Dalswinton, Lochmaben, Congleton, in the centre and south, besides many others.

Most of these have either disappeared or have been entirely remodelled, but a sufficient number remain to enable us to follow their design, which we shall find resembles in idea, though inferior in degree to, that of the contemporary buildings in France and England.

The general idea of these thirteenth-century Scotch castles is that of a large fortified enclosure. The plan is usually quadrilateral, but more or less irregular, so as to suit the site. There are however some striking exceptions to this rule, as for instance the Castle of Rothesay, the plan of which is oval, and Caerlaverock Castle, which is triangular. The curtain walls are about 7 to 9 feet in thickness by 20 to 30 feet high. The angles are frequently provided with round or square towers, and no doubt these and the curtains had parapets with embrasures for defence, and rampart walks all round the walls. But these have now in almost every instance disappeared. The entrance gateway was always wide, and seems to have been generally provided with a portcullis. There is sometimes also a postern door.

It is impossible to say what the arrangement of the buildings within the enclosing walls may have been, as they have almost entirely perished. The angle towers seem to have been used as the dwellings of the garrison, as they are frequently provided with garde-robes in the thickness of the wall, but there were probably other buildings within the enclosure with roofs leaning against the curtains. At Rothesay a large chapel still survives, while at Lochindorb a ruinous building is also called the chapel, and it is very probable that other castles contained a similar edifice.

The sites selected for this class of castle vary greatly. They are, however, generally built on rather low-lying ground, and trust more to water than to lofty sites for their security. Thus we find Lochmaben and Lochindorb situated, the latter on a natural island, and the former on a peninsula cut off by ditches, so as to convert it into an island. Kinclaven and Inverlochy are both placed near rivers, and were no doubt defended with moats filled with water. Rothesay is on low ground surrounded by a wide and deep fosse filled with water. Castle Roy and Dunstaffnage, again, are on rocky sites, but raised only a few feet above the general level of the ground. Tarbert is situated on the top of a low rocky hill overlooking the sea.

The large area contained within the walls was no doubt intended to receive and harbour the population of a district, with their flocks and possessions, in time of danger. They are, for the most part, rude imitations of the thirteenth-century castles of France or the Edwardian castles of England ; but some of the finer examples, such as Bothwell, Kildrummie, and Dirleton, present a wonderfully close resemblance both in design and

workmanship to the more splendid military buildings of the south. These have all the characteristics of the French castles of the thirteenth century. They are enclosed with high curtains, defended at intervals with round and square towers, each forming a separate post, and each so placed as to flank and defend the adjoining walls and towers, while one of the towers is of larger size than the others, and forms the donjon or place of strength for the shelter of the lord and his retainers in case of siege.

It is not easy to determine the date of most of these early Scottish castles; but we have distinct information with regard to the building of others. Thus Tarbert was added to by King Robert Bruce, and must therefore have existed before his time, while Lochindorb, Bothwell, and Kildrummie were probably enlarged during the English occupation. There can be no doubt, however, but that several of the castles of this first period are of older date than the War of Independence, as they are referred to as existing in Wallace's time.

CASTLE ROY, Inverness-shire.

One of the simplest of these thirteenth-century fortresses is Castle Roy (or Redcastle) (Fig. 44), situated in the Abernethy district of Inverness-shire. It is said to have been a stronghold of the Comyns, but nothing authentic is known of its history. Situated about one mile north-east from Broomhill Station of the Highland Railway, it stands on a rising ground, somewhat elevated above the general valley of the Spey. It consists of the usual high enclosing wall, which in this case crowns a rocky site, raised from 10 to 15 feet above the level of the surrounding fields. The nature of the site has probably rendered a ditch unnecessary, as there is no appearance of there ever having been one. The walls are 7 feet thick, built with strong rubble-work, and are still from 20 to 25 feet high. The enclosed space measures 80 feet from north to south, by 53 feet from east to west within the walls. The entrance is by a doorway, 8 feet wide, in the north wall, the inner pointed arch of which still remains (Fig. 45). There is a square tower at the north-west angle, and the remains of a large window near it, which has also a pointed arch in the reveal (Fig. 45); but it seems doubtful whether these are not later additions. The north-east angle of the enclosure (Fig. 46) is complete, without any appearance of a

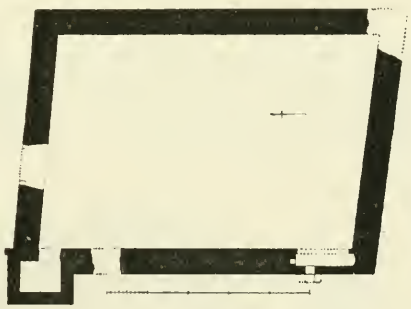


Fig. 44.—Castle Roy. Plan.

tower having ever existed there. At the south-east angle the wall is broken away, as if for the purpose of adding a tower similar to that at the north-west angle, but apparently no tower has ever been built there.

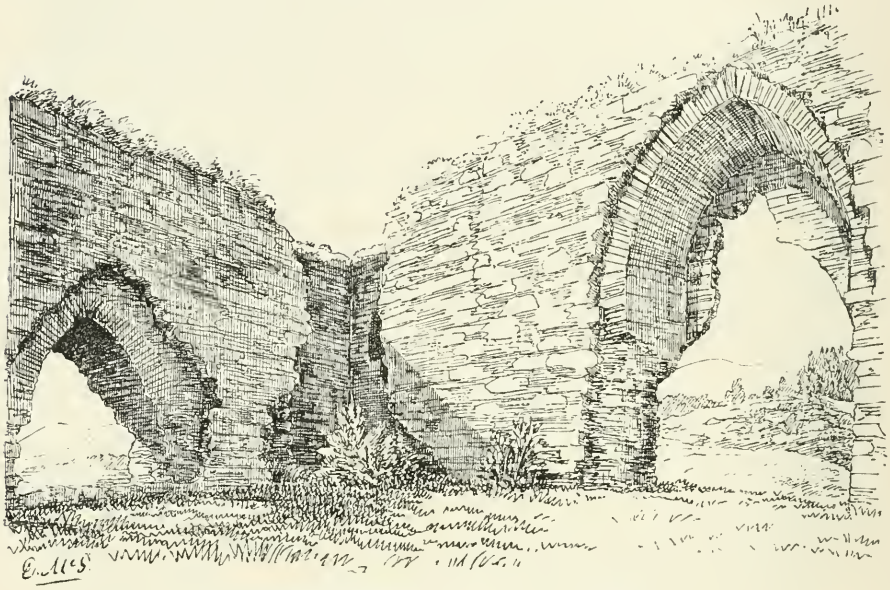


FIG. 45.—Castle Roy. Interior looking North-East.

The recess in the wall at the south-west angle, which is on the ground-level, seems to have been used as latrines. There is a projecting garde-robe over this in the upper part of the wall, but no appearance of any tower at this angle either.

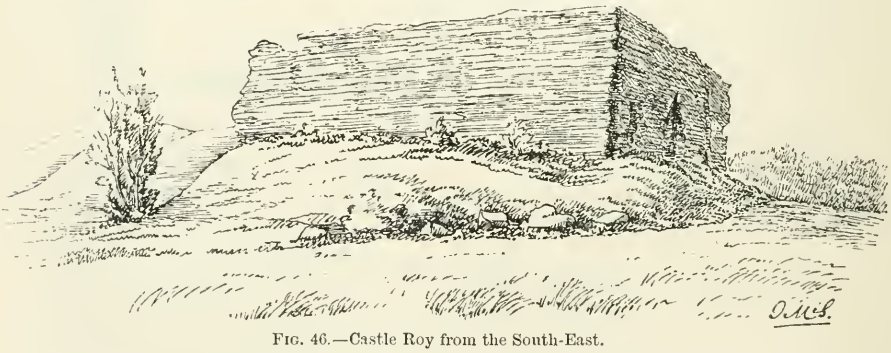


FIG. 46.—Castle Roy from the South-East.

The building seems to have been simply a large enclosing wall of great height, and no doubt well defended from the parapet, for the purpose of sheltering the vassals and their property. There were pro-

bably wooden or other buildings within the enclosure with roofs supported against the curtains, but no trace of these now exists.

KINCLAVEN CASTLE, Perthshire.

Kinclaven Castle is situated on the right bank of the Tay, opposite its junction with the river Isla, and about 8 miles north from Perth. The Tay is here a stream of about 130 yards wide, swift and clear, with banks of moderate height, abundantly wooded. The castle (Fig. 47) consists of a square enclosure, measuring on the average 130 feet over the walls, which are 7 feet 6 inches in thickness, and in height vary from 15 to 25 feet. There were evidently towers at each of the angles, and, as far as can be made out, these were square on plan. They were entered from the courtyard by narrow doors about 2 or 3 feet wide. Parts of their rybats still remain, showing that the doors opened into the towers. The principal entrance was near the south end of the west side, being the side furthest from the river. The gateway is 9 feet 8 inches wide, and, as far as can be judged from the scanty remains, it was provided with a portcullis.

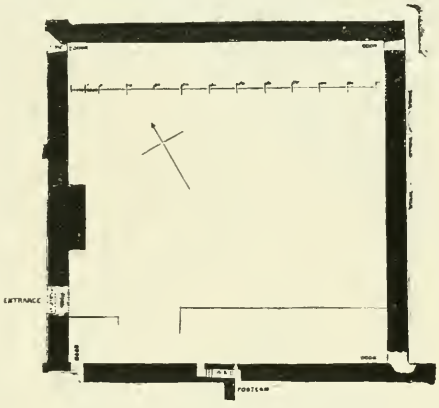


Fig. 47.—Kinclaven Castle. Plan.

There is a postern in the centre of the south front, 2 feet 2 inches wide, which, entering from the outside, turns along in the thickness of the wall for 16 feet 2 inches, and, descending three steps, opens into the court. The roof of this passage, which is some 8 or 9 feet high, is formed with flat stones. The postern was evidently defended by a square tower, of which only one side partly remains. Opposite the door there is a small window looking from the entrance passage into the courtyard.

In the centre of the west side, and about 13 feet distant from the portcullis entrance, the wall is thickened on the inside for a length of about 24 feet, the additional thickness being some 6 feet. This was probably for the support of a stair leading to the walk on the top of the walls, as also to the place for working the portcullis; but it is so very much overgrown with vegetation and covered with ruins that one cannot be certain. The southern half of the west front has a projecting base outside, which stops short with a properly wrought return about

the centre for a wall at right angles, while beyond this there will be seen on the plan the projecting remains of a wall, probably of a tower for defending the front entrance; but here the recent accumulation of ruin is so great that not much can be made out. On the east side, at about 10 feet above the ground, and where indicated on the plan, there are three gaps in the wall. These have been stripped of their dressings; and large portions of the walls outside have also been skinned for the sake of the dressed stones. There are neither loops nor shot-holes in the walls; these were probably confined to the flanking towers. Of the interior buildings not a vestige remains, unless it be that the slight depression of 5 or 6 inches in the ground all along the south wall within the space, shown by a line on the plan, indicates where they stood, which it probably does. Such buildings in a castle of this kind were of a very simple construction, having a mere lean-to roof against the curtain.

The castle is protected on the east side (Fig. 47A) by the Tay and the steep bank, as also on the north side, although to a less extent, the Tay being farther off and the bank being more prolonged and thus not so steep. On the west side the ground is generally level for about 50 or 60 feet from the wall, beyond which the land gradually rises, while on the south (Fig. 47B) it slopes downwards gently from the walls for some 50 or 60 feet, and rises beyond. There was probably in this latter hollow a ditch which continued round the west side and along the north, opening out into the steep bank sloping to the Tay. Here and there, especially on the north side, indications of the ditch are visible, and Blind Harry refers to a drawbridge, as we shall see. From the south-west corner a diagonal mound or wall (earth and stones are so mixed that one cannot be positive which it was) runs outwards for about 60 feet, and at the south-east corner a similar construction runs outwards for about the same distance, but at right angles with the south curtain. Fig. 47B gives an idea of the appearance of the castle and its surroundings.

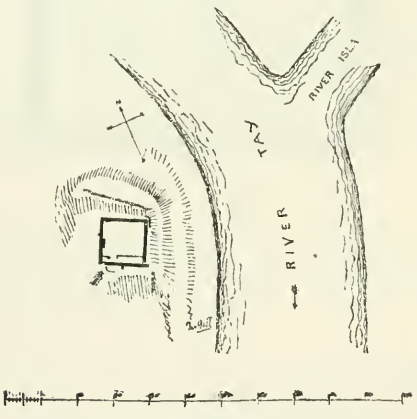


FIG. 47A.—Kinclaven Castle. Plan of Site.

This castle was a royal residence in the time of Alexander III., and is mentioned in the year 1264 (see *Exchequer Rolls of Scotland*, vol. i.), when payments are made for the carriage of wine to Kinclaven and for the repairing of a boat.

Thirty-three years later, or in 1297, according to tradition and Henry the Minstrel, Wallace took Kinclaven, "a castell wondyr

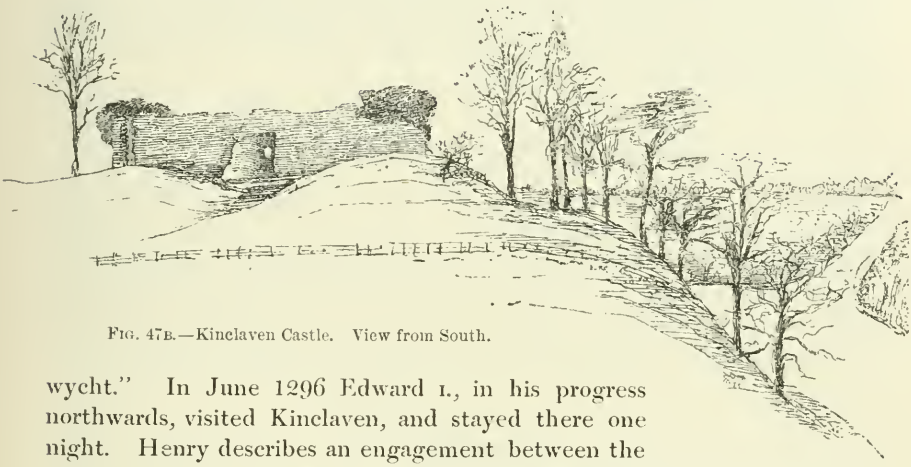


Fig. 47b.—Kinclaven Castle. View from South.

wycht." In June 1296 Edward I., in his progress northwards, visited Kinclaven, and stayed there one night. Henry describes an engagement between the English garrison and Wallace some little distance from the castle, the defeat and flight of the former, pursued by the Scots towards their strength, where

> "Few men of fenss was left that place to kepe,
> Wemen and preistis wpon the wall can wepe:
> For weill thai wend the fleais was their lord;
> To tuk him in thai maid thaim redy ford,
> Leit doun the bryg, kest up the yettis wide.
> The frayit folk entrit, and durst nocht byde."

Here Wallace and his followers stayed seven days, spoiled and wrecked the place, and under cloud of night betook themselves to the neighbouring woods, when

> "The contre folk, quhen it was lycht of day,
> Gret reik saw ryss, and to Kynclewyn thai socht:
> Bot wallis and stane, mar gud thar fand thai nocht."

Although thus cast down, the castle was evidently put in order again, and in 1335 was, along with other strongholds, held by Edward III., then master of Scotland, but in the following year most of these castles, including Kinclaven, were recaptured by the Scots.

Kinclaven never was a residence, but was purely a garrison castle. It must have been abandoned for many centuries, as old fruit-trees are growing in the courtyard, and probably when the Minstrel wrote, his description was true to his time as to ours—

> "In till Kinclewyn thar duelt nane agayne;
> Thar was left nocht bot brokyn wallis in playne."

It has been several times stated that a sum of money is annually paid by Government for keeping this castle in repair. Of the accuracy of this statement we know nothing, but it is quite apparent that no attention whatever is paid to the building, and great portions of the walls have fallen within the last few years.

LOCHINDORB CASTLE, Morayshire.

The castle of Lochindorb is situated in Cromdale, in Morayshire, about 7 miles from Grantown. It occupies the whole of an island, extending to about one Scotch acre, in the middle of the loch, which is about 2 miles long by three-quarters of a mile broad. The Old Statistical Account states that the island is at least partly artificial, as "rafts and planks of oak are sometimes brought to light by the beating of the waves."

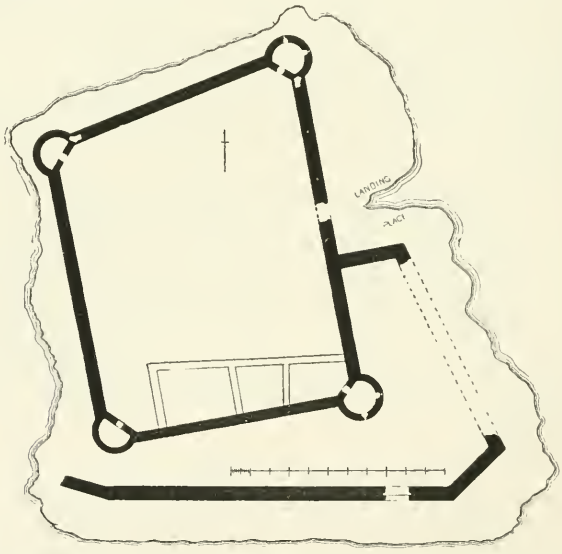


Fig. 48.—Lochindorb Castle. Plan.

The castle (Fig. 48) consists of the usual quadrilateral enclosing walls, forming a slightly irregular parallelogram, measuring an average length of 160 feet from north to south, by 126 feet from east to west. The walls are about 7 feet thick and 20 feet high. At each angle is a round tower, 23 feet in diameter, enclosed next the courtyard with a diagonal wall containing a door into the tower. These towers are two stories in height, and had wooden floors and small windows with iron stanchions. They were all standing in 1793 when the Old Statistical Account was written, but now there are only two in fair preservation.

The projection of the towers is slight, thus forming a link between such castles as Castle Roy without towers at the angles and the subsequent ones in which the towers have a bold salient. There are garde-robes in the thickness of the walls adjoining two of the angle towers. It seems, therefore, likely that these were occupied as living-rooms by the garrison.

The entrance to the castle is from the east, where there is a landing-place. The doorway is 9 feet wide, and has been arched. Extending along the south side of the courtyard there are the ruins of buildings, the westmost one of which is called the chapel, but from the state of these fragments it is impossible to determine their date or destination. A very remarkable part of this castle is an outer enclosing wall extending along the south and part of the east sides. It is broken off at the west end by the force of the waves, and there is no saying how much further it may have gone on that side. The portion of the wall on the south side is about 20 feet high, and contains a well-formed gateway. The jambs are of dressed freestone, with splay on the outside, which has been continued round the depressed arch, now demolished. This gateway has the grooves for a portcullis well cut on each side. The part of the wall shown by dotted lines on the east side is reduced to mere foundations, except the portion at the north end, which is well preserved. The remarkable thing about this outer courtyard is, that, except the above-mentioned gateway, there is no other means of ingress or egress, and no communication with the inner courtyard. Fig. 49 gives a general view of the castle from the south-east.

This castle belonged in the thirteenth century to the Comyns, Lords of Badenoch. In 1303 Edward I. penetrated into Badenoch, for the purpose of reducing them. He then resided at Lochindorb Castle for about a month. From this time it remained for several years in the hands of the English, and it is supposed that they greatly extended it. Possibly the enclosing wall of the outer court with the depressed arched gate may have been added by them as a basse-cour for cattle and provisions, and also to enclose the whole island, so as to prevent an enemy from obtaining a footing on it. After the English had retired from Scotland, Lochindorb became a royal castle. In 1335 it was held by the Duke of Athole for Edward Baliol, and besieged by the Regent, Sir Andrew Murray. In 1372 it became the stronghold of King Robert II.'s fierce son, "the Wolfe of Badenoch." In 1455 the castle was strengthened by Archibald Douglas, when he became Earl of Moray, and after the fall of the Douglases it was destroyed by order of King James II. The warrant for its demolition was granted to the Thane of Cawdor in March 1455-56, and the Exchequer Accounts attest that this was done in 1458. It is said that the "iron yett" of Cawdor Castle was carried off from Lochindorb at that time. The castle now belongs to the Earl of Seafield.

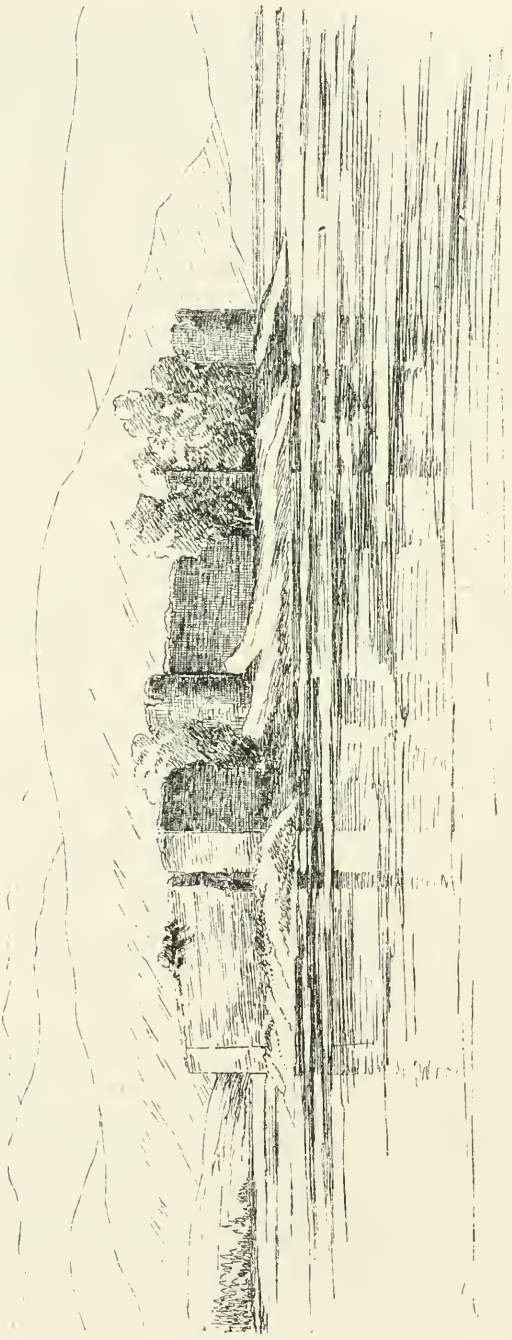


Fig. 49.—Lochindorb Castle from the South-East.

LOCH-AN-EILAN CASTLE, Inverness-shire.

This castle (Fig. 50), like Lochindorb, is situated on an island in the middle of a loch, surrounded with lofty mountains. The loch is about 1 mile in length, and a quarter of a mile broad. It lies in the midst of the remains of the ancient forest of Rothiemurchus, in Inverness-shire, about 3 miles from the Aviemore Station of the Highland Railway. This castle was also one of the strongholds of the Wolf of Badenoch. It is now occupied by ospreys, whose nest is seen on the top of the tower to the right, and, in order to save them from disturbance, no boats are allowed on the loch, and it is therefore impossible to examine the buildings, or make a plan of them. They appear, however, to consist of the same high and massive enclosing walls as Lochindorb, and the whole island seems to have been enclosed by the walls. There was a strong square tower to the right, the walls of which rise perpendicularly from the water's edge, while the adjoining central curtain, in which is the entrance door, is battered or sloped inwards.

INVERLOCHY CASTLE, Inverness-shire.

Inverlochy Castle, Inverness-shire, is situated on level ground on the south side of the river Lochy, a short way above its junction with Loch Linnhe, and about 2 miles from Fort-William.

There is no record of the origin of this castle, but, according to the Statistical Account, tradition says that it was built by the Comyns.

In the absence of any proper history, it has been conjectured that it may have been erected in the latter half of the fifteenth century by George, second Earl of Huntly, and it is stated to have been still unfinished in the time of Charles II.

As will be hereafter pointed out, some great castles with quadrangles were erected in the fifteenth century, but their leading characteristics are different from those of Inverlochy. They have high and thick enclosing walls, and sometimes round towers also, but the walls of the enceinte invariably form an integral part of the buildings which compose the castle. In this case the walls of the enceinte stand alone, without connection with any internal buildings, nor are there any windows or shot-holes in the walls (such as we invariably find in fifteenth-century work) to indicate that any buildings of that kind ever existed.

A glance at the plan (Fig. 51) will show that it has much more affinity with the arrangements of the thirteenth-century castles above described, while its great round towers projecting boldly at the four angles bring it into connection with the more finished castles of the period about to be referred to.

Inverlochy Castle consists of a great courtyard, measuring 101 feet from north to south, by 90 feet from east to west, surrounded by walls of

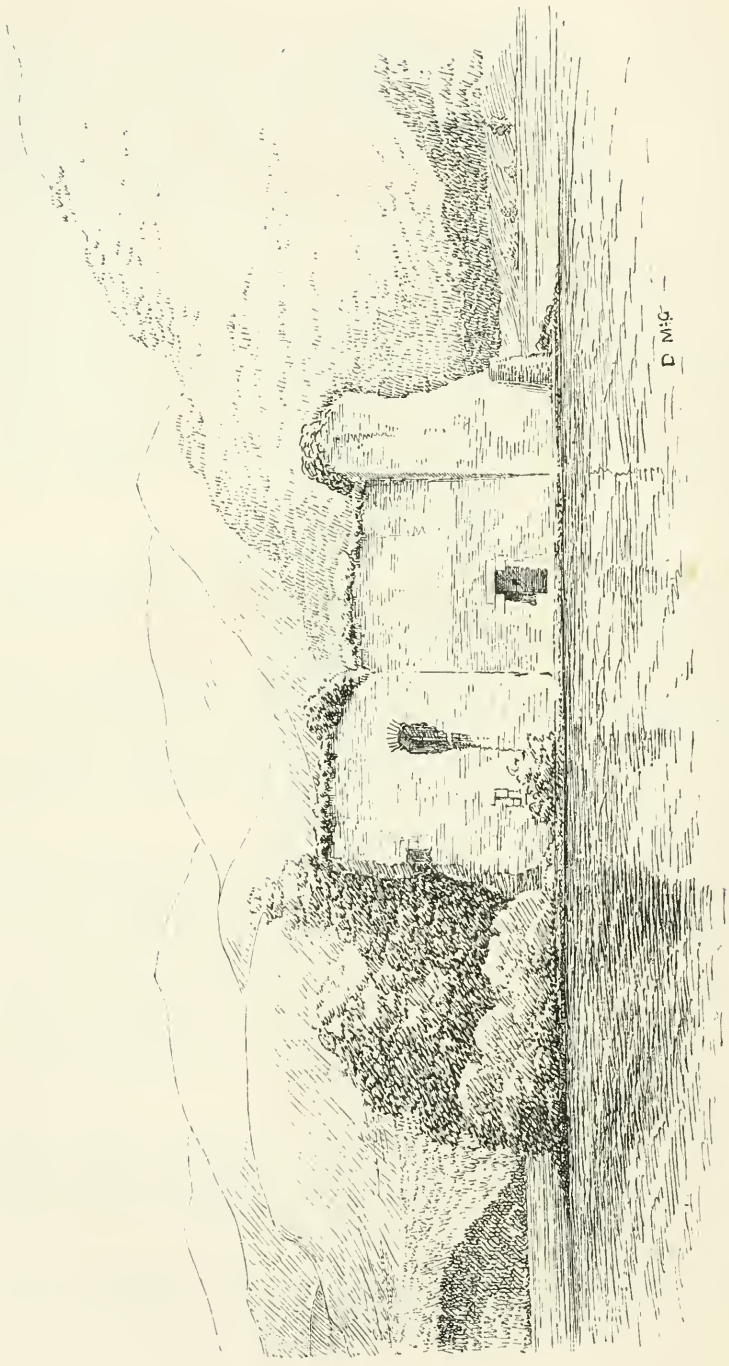


Fig. 50.—Loch-an-Eilan Castle from the West.

enceinte 9 feet in thickness, and which were probably about 30 feet high, though now reduced to from 20 to 25 feet. There is a principal gate-

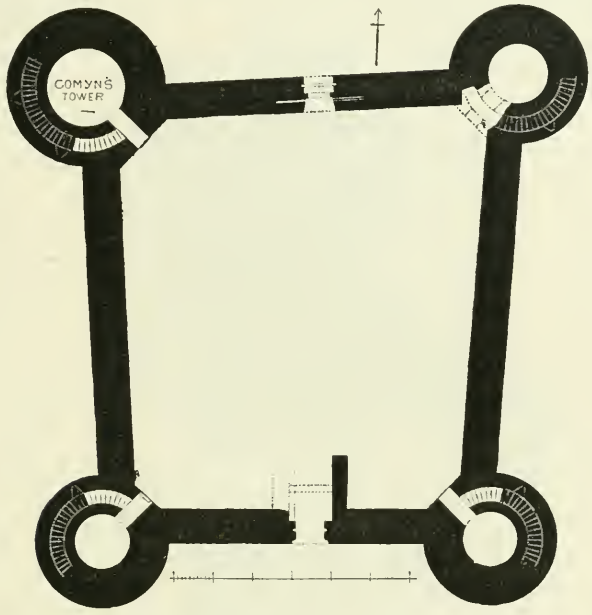


Fig. 51.—Inverlochy Castle. Plan.

way in the south wall, 7 feet 6 inches wide, and another immediately opposite in the north wall, 5 feet 6 inches wide. These were each provided with a portcullis, the grooves for which are still partly preserved. Some portions of the freestone dressings of the doors still exist, showing that the angles have all plain splays. The south gate has had an internal gate-house, with probably an interior door and apertures in the roof from which assailants might be attacked. The north door has been strengthened with two oaken bars running into grooves in the wall, one opposite the lower part and the other opposite the higher part of the door. There are some traces of building outside this door, which may indicate that there was at one time an outer porch or gate-house.

The angles at the north-east, south-east, and south-west are fortified with round towers, about 14 feet diameter internally, and each is provided with a stair in the thickness of the wall, winding round the tower, and giving access to the two upper floors and the battlements.

The tower at the north-west angle (Fig. 52), called the Comyn's Tower, is larger than the others, and formed the donjon or residence of the lord of the castle. It is 20 feet in diameter within the walls, which are 10 feet 4 inches thick, and contain a staircase 3 feet 6 inches wide, arranged in the same manner as in the other towers. The angle towers

were provided with loops to light the staircases and upper rooms ; but these are now represented only by holes in the walls, the freestone dressings being torn out. There is, however, a portion of one loop left in the

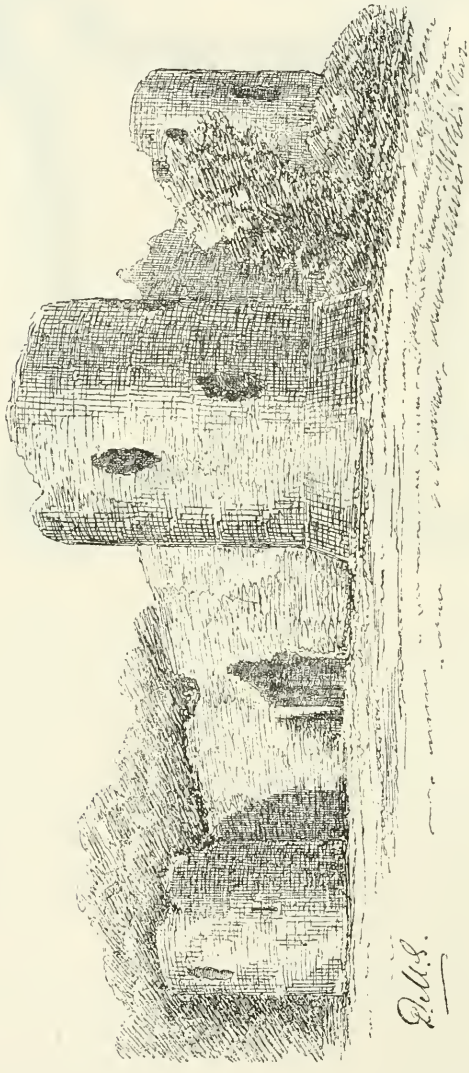


Fig. 52.—Inverlochy Castle from the North-West.

north-east tower, showing that they were narrow slits, splayed on the outside, with a round termination or oilet at the bottom. The donjon was probably higher as well as larger than the other towers, as we shall see was usually the case.

The whole castle was surrounded with a moat about 30 feet wide, placed about 40 feet from the building. This was no doubt supplied with water

Fig. 53.—Inverlochy Castle from the South-West.

from the river. Its position may still be traced in the marshy depression in the ground round the castle. Along the south front (Fig. 53) the ground between the towers is raised above the general level, and has formed a platform with a retaining wall. Some remains of masonry in front of this and immediately opposite the entrance gate indicate the position of the drawbridge.

The locality of Inverlochy is supposed to have been the site of an ancient Pictish town, which was demolished by the Danes. But apart from this tradition, we think there can be no question about the antiquity of the castle. Its thick walls, without openings, and unconnected with other buildings, associate it with the style of castles erected in the thirteenth century, while its boldly projected round towers give it a striking resemblance to the castles of the period in France and England, such as Coucy and Pevensey. The form of the staircases in the towers is also characteristic of thirteenth-century work, as for example at Conisborough Castle, Yorkshire.

LOCHMABEN CASTLE, Dumfriesshire.

Lochmaben Castle, in Dumfriesshire, the hereditary castle of the Bruces, was the most powerful fortress on the Borders. The lordship of Annandale was bestowed on the Bruces by David I. in 1124, and it is said that their original castle was on the Castle-hill, close to the town of Lochmaben, and that the present castle was built in the thirteenth century by Robert Bruce (King Robert's grandfather), the competitor for the crown, who died here in 1295. There are some relics of masonry on the top of the Castle-hill, and there is an intrenchment round the base, indicating that the original castle was of the earlier order of strongholds, whose chief defences consisted of earthen mounds with palisades and ditches.

The existing castle is built on a peninsula or spit of flat ground running into Lochmaben from the south-east (Fig. 54). A wide ditch cut across the neck of the peninsula, which joined a burn on the east, and was filled with water from the loch, separated it from the mainland, and formed an island about 16 acres in extent. Before reaching the castle the intervening ground is defended by two additional ditches, running east and west, through which also, no doubt, the water of the lake flowed. These ditches would all be provided with well-fortified drawbridges. Close to the castle, and partly enclosed within its walls, there is a fourth ditch.

Fig. 54.—Plan of Site.

The plan (Fig. 55) shows that this ditch or moat, about 20 feet wide, was enclosed at either end of the castle with a great wall, each having

an arched opening through which the water flowed (Fig. 56). The moat was here lined with ashlar, some portions of which still remain. It seems probable that a wall extended along the front of the building outside the moat, and joined the two ends of the above wing walls, so as to enclose this portion of the moat. Access to the castle was likely chiefly by means of boats, and this enclosure would form a safe landing-place, and also protect the boats which might be collected within it. The recess in the centre under the gateway is evidently intended for a boat being set back into. The arches in the wing walls would be secured with grated iron gates, and there would be a strongly secured gate in the front wall. The moat would be well defended from the battlements all round this outer court.

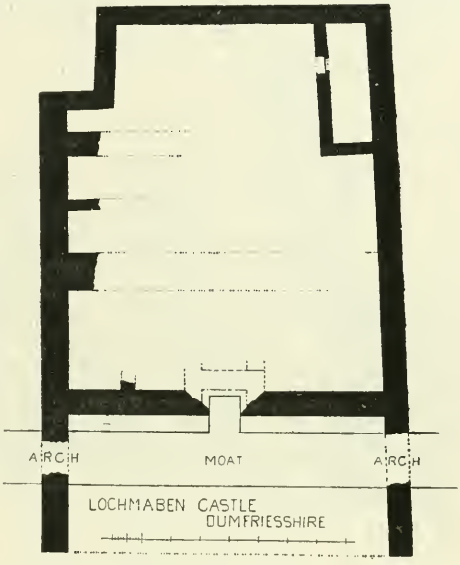


Fig. 55.— Lochmaben Castle. Plan.

The remainder of the building is very similar to Kinclaven and other castles of the period, being a parallelogram 126 feet long from north to south, by 108 feet wide from east to west. The walls are of the usual solid description, and have been faced with ashlar. But this has now almost entirely disappeared, having been peeled off and carried away,— this castle having been used, as is unfortunately so often the case with our ancient buildings, as a convenient quarry for building materials.

The plan shows that there are a few indications of buildings within the walls, but it is difficult to say whether any of these are original. In 1503-4 James IV. repaired the castle, and built a hall within it, and it may be the scanty remains of his construction which are now visible.

The walls were undoubtedly, as may be seen from their ruins, of great height, and were no doubt well provided with parapets and defences on the top; but they are now reduced to mere shapeless fragments.

This castle commanded the entrance to the south-west of Scotland, and was therefore the subject of many contests. It was taken by Edward I. in 1298, and he is said to have strengthened its works. In 1304 Robert Bruce fled to it from England before taking the field for the crown of Scotland. After his success, he bestowed it on Randolph, Earl of Moray. The castle was handed over to Edward III. by Baliol, but it

was besieged and retaken by David II. in 1346. After the Battle of the Standard it again fell into Edward's hands, till Archibald Douglas, Lord of Galloway, reduced it, and expelled the English in 1384. At the

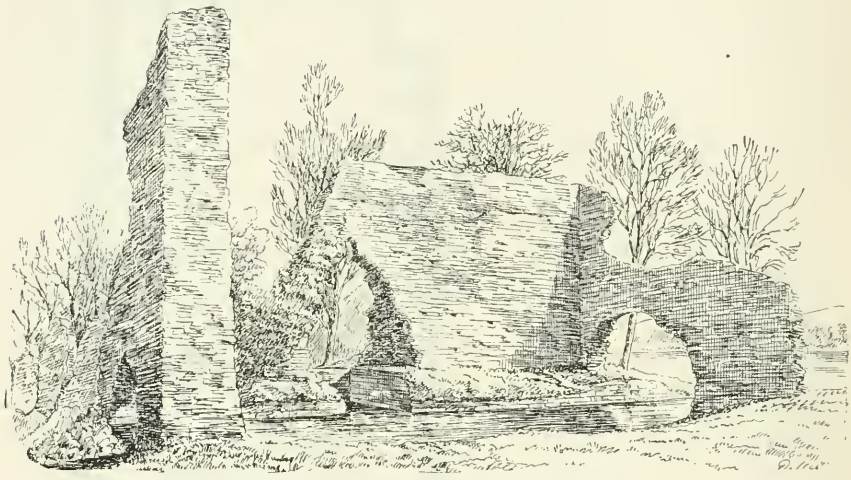


FIG. 56.—Lochmaben Castle. View of Entrance Front.

attainder of the Douglases in 1455 it became a royal castle. In 1588 it was besieged and taken by James VI. from Lord Maxwell, and the governorship granted to the Earl of Annandale. Mr. Hope Johnstone of Annandale is now the Hereditary Keeper of the castle.

ROTHESAY CASTLE, BUTESHIRE.

The origin of this most remarkable castle is involved in obscurity. It is said to have been erected in very early times to resist the encroachments of the Norsemen. In the time of Alexander III. it was attacked by the Norwegians with eighty ships, and taken, but was retaken after the Battle of Largs in 1263. It was also taken and retaken several times in the wars of Bruce and Baliol.

Rothesay Castle was a favourite residence of Robert II. and Robert III. in the fourteenth century, but there are no records in the Exchequer Rolls of outlay connected with it. In 1398 King Robert created his son David the first Duke of Rothesay, a title still retained by the Prince of Wales.

The castle was destroyed by Argyll in 1685. The mildness of the climate of Rothesay, and the sheltered position of its bay, have made it a desirable place of residence at all times. Being on an island also added

to its security, and its low situation enabled it to be surrounded with a deep fosse filled with water. This was for long filled up, but has within recent years been cleared out, and the wooden way of approach restored by the present noble proprietor, the Marquis of Bute. It is said that

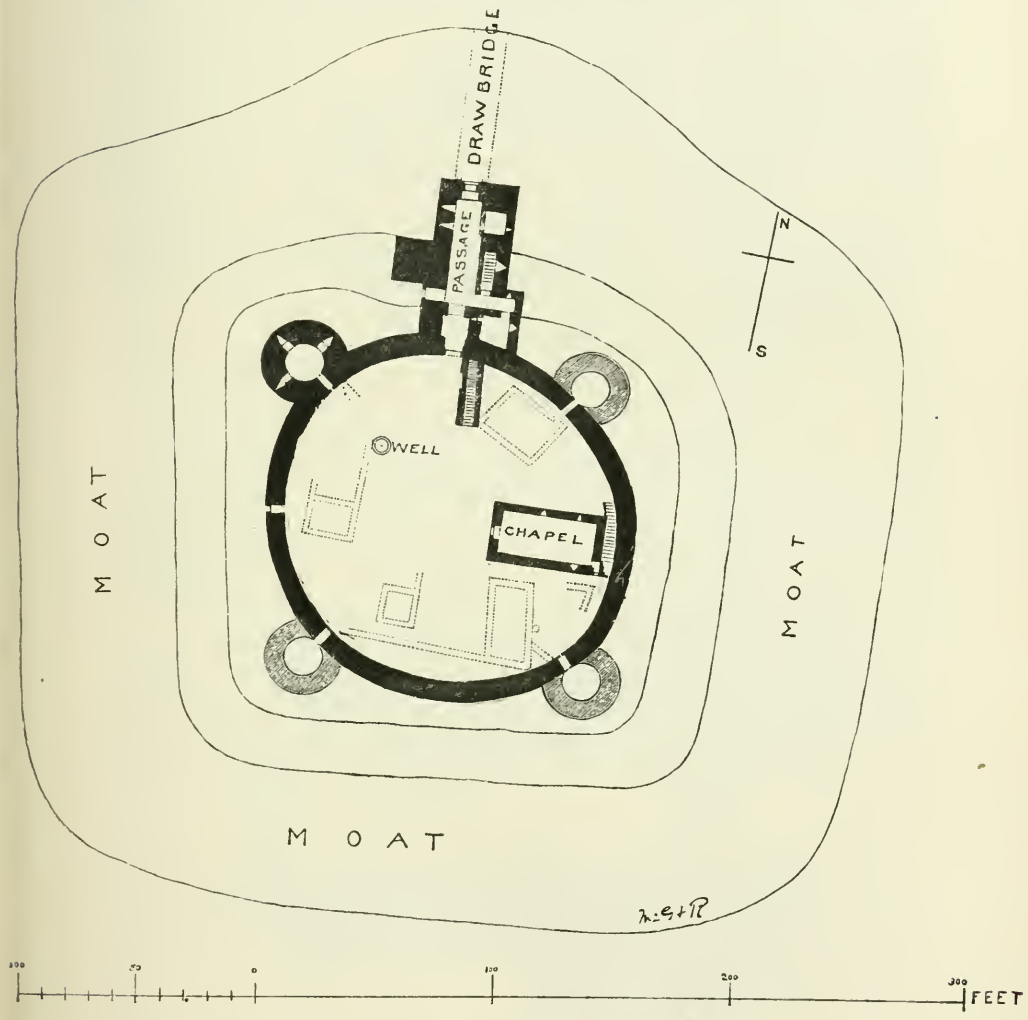


FIG. 57.—Rothesay Castle. General Plan, showing Moat, etc.

some remains of the old wooden posts which carried the ancient bridge were found in the excavations.

Architecturally, this is one of our most interesting castles, and is an admirable example of a thirteenth-century fortress. We here see (Fig. 57) the great wall of enceinte in its simplest form, defended by

four round towers. This castle differs from the examples already given in having the wall of enceinte of a circular or oval form, instead of quadrilateral ; but the ditch, enclosing the wall with its towers, brings the whole approximately to the usual square form. The walls are from 8 to 10 feet in thickness, and the diameter of the courtyard is 142 feet. The wall of enceinte is well preserved, and is built with good ashlar-work. The forms of the loop-holes and their recesses are of an early type. The top of the walls would be finished with a parapet resting on projecting corbels with machicolations between, or armed with a wooden hoarding—it is impossible to say which, but probably the latter. Some corbels still remaining in the north-west part of the wall seem to indicate the position of these defences (Fig. 58). The upper part of the wall above them is of a different style of masonry, and was evidently heightened at a later period, and will be referred to further on. The entrance gateway seems to have been (as at present) at the north end, through a square tower projecting about 16 feet from the wall of the enceinte. There remain the grooves of two portcullises, and one jamb of the inner gateway, afterwards reduced in size. In the small guard-room added on the east side of this tower may still be seen two bold stone corbels, which look as if they had formed part of the defences of the original gate-tower, which is incorporated with the later buildings. Of the four round towers, only the one to the north-west remains in good preservation ; the three others are considerably demolished, but the lower part of each still exists, showing the usual batter at the base. They have each a door entering from the courtyard on the ground level.

The chapel is the only building within the enceinte of which the walls remain, but the foundations of many other buildings can be traced. These give an idea of the irregular manner in which the buildings within the wall of the enceinte of these early castles were scattered about. The chapel is of early date, but has no architectural features of much interest. At the back or east end of the chapel is a staircase leading to the ramparts.

The building which runs out to the north of the ancient entrance tower, and forms the existing entrance, is of later date. It is built with rubble-work, and resembles in almost all its features the quadrilateral keeps of the fourteenth century. It is most probable that it was built by Robert II. or III., so as to provide a residence similar to their other royal castles, such as Dundonald. In this case the ground floor is almost entirely occupied with a vaulted passage, 11 feet 6 inches wide, leading into the castle. The cellars, etc., usually occupying this position would be amply supplied by stores in the courtyard. The entrance door was no doubt defended by a drawbridge and iron gate, and has a small guard-room adjoining. On the west side of the passage is a small door leading to the ground between the wall and the moat. The square tower adjoin-

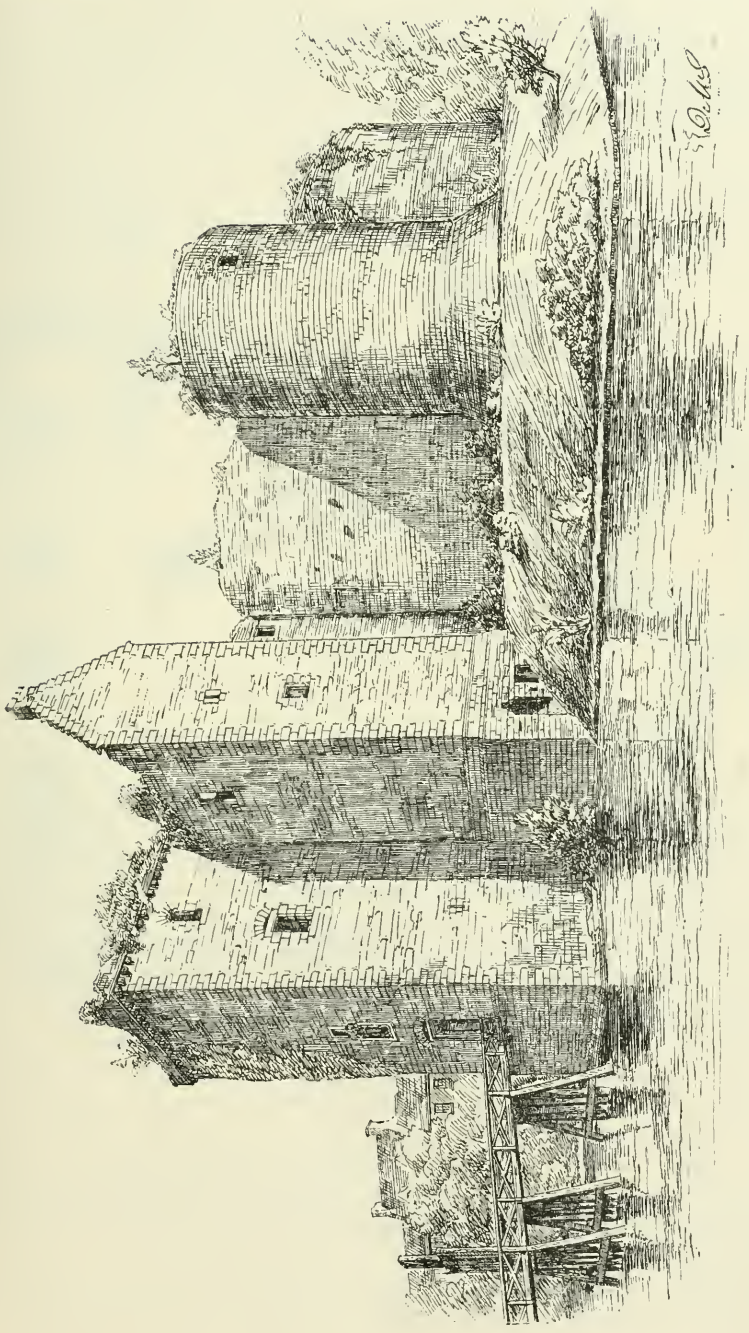


Fig. 58.—Rothesay Castle from the North-West.

ing this, and masking it, contains the shoots from latrines on the upper floor. The chamber on the east side adjoining the stair to the hall seems to have served as a guard-room, from the small window in it commanding the entrance passage.

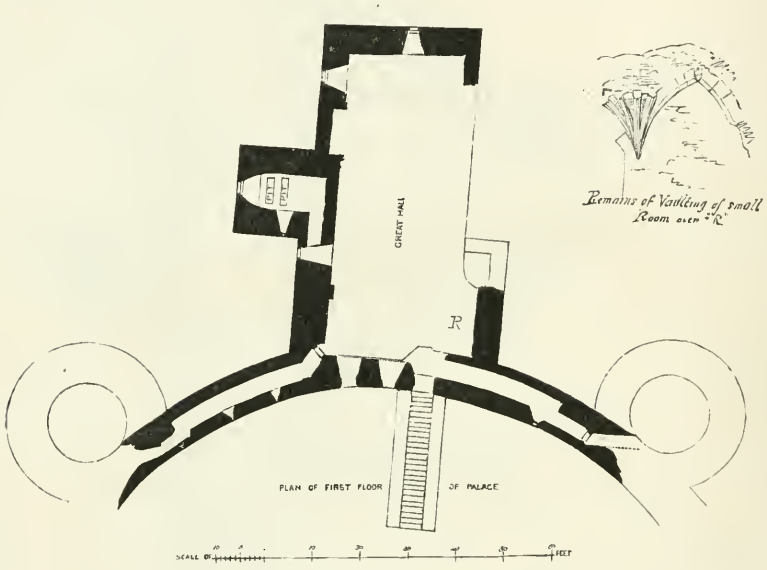


Fig. 59.—Rothesay Castle. Plan of First Floor of Palace.

The upper floor of the keep (Fig. 59) is now approached by a long straight stair from the courtyard, but the original stair was evidently that adjoining the guard-room. This led to the hall, which was 49 feet long by 24 feet 6 inches wide. The great fireplace still remains, and there appear to have been windows on three sides. At the south end a portion, 12 feet wide, was cut off by a partition to form a private room, which had a large window overlooking the courtyard. From this passages in the heightened portion of the wall of enceinte lead to the north-east and north-west towers, which were probably used as apartments in connection with the palace. On the upper floor above this point are the remains of groined and ribbed vaulting, as if there had been a small vaulted oratory there (Fig. 59); otherwise, the upper floor cannot now be distinctly made out. The square west tower contains two wide apertures, which terminate in shoots into the moat at the base of the tower, and were evidently the latrines for the two upper floors (Fig. 58).

DUNSTAFFNAGE CASTLE, Argyllshire.

Dunstaffnage Castle, in the Lorne district of Argyllshire, stands near the point of a low-lying peninsula jutting out into the sea at the entrance to Loch Etive, and is about 4 miles distant northwards from Oban. The peninsula, about half a mile in length, is about 700 yards in width at the neck, uneven and diversified on its surface, and well wooded. The site of the castle is a rocky platform, rising from 20 to 30 feet above the

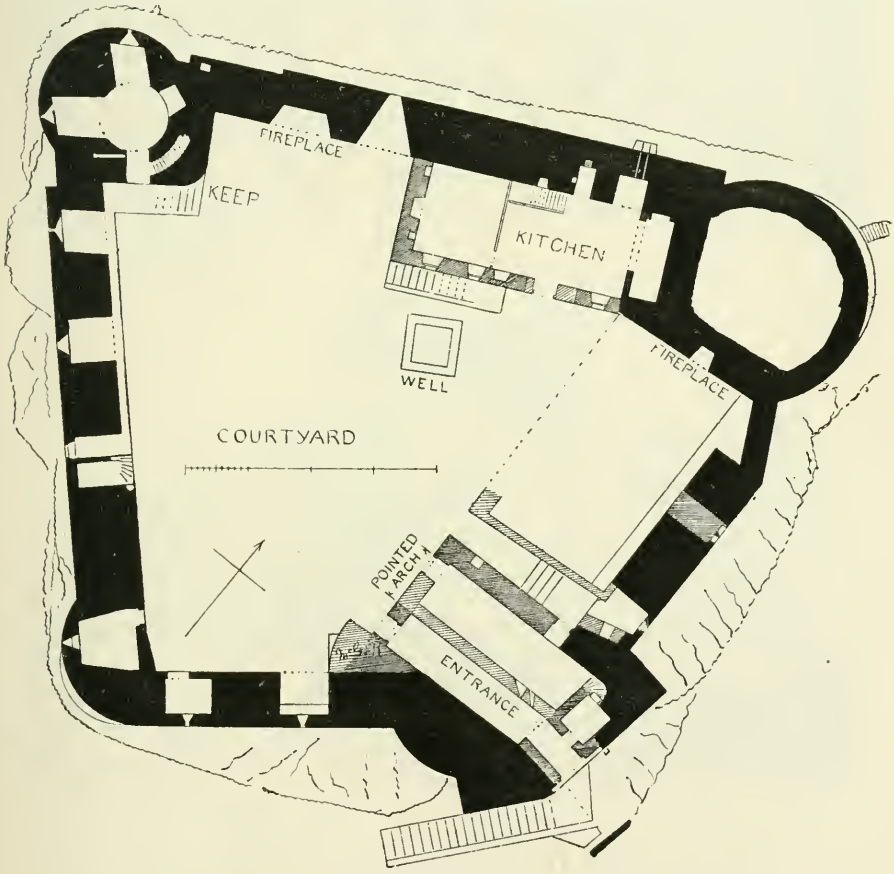


Fig. 60.—Dunstaffnage Castle. Plan of Ground Floor.

general surface of the ground, with precipitous faces, that along the north front overhanging considerably. The walls follow the outline of the rock, and are built sheer up from the edge, so as to allow no foothold on the rock outside. In plan, the castle (Fig. 60) is rudely quadrangular, with great curtain walls, from 9 to 11 feet thick, and about 60 feet high

from the ground outside to the top of the battlements, or 25 feet high from the parapet walk to the courtyard inside. At the east and west ends of the north front are round towers ; over these this front measures about 137 feet. At the meeting of the south and west fronts, the wall is rounded, and slightly projected beyond the west face only, along which the castle measures about 112 feet. At the south-east corner, where the entrance is, there is a two-faced projection—one face parallel with the east front, and the other set on diagonally, and connected with the south front by a solid round in the re-entering angle. Along the south front the walls are about 68 feet long, and along the east front about 100 feet. The entrance gateway, placed about 12 or 15 feet above the ground, was undoubtedly reached by a drawbridge ; remains of what was probably its pier exist in the garden opposite. The present staircase, leading to the entrance doorway, is of comparatively modern date. The whole of this part of the castle has undergone alterations on the outside at various times. The principal entrance was by a pointed arched doorway

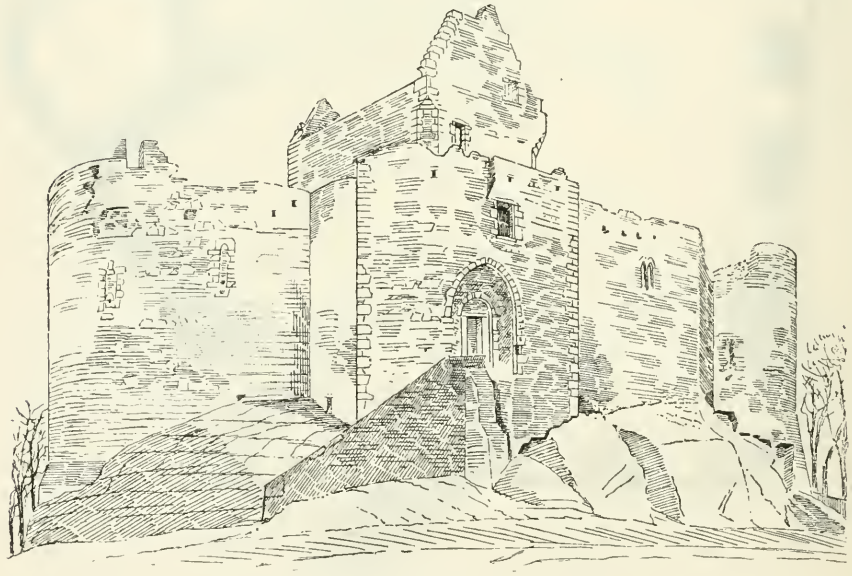


Fig. 61.—Dunstaffnage Castle from the South-East.

(Fig. 61), about 10 feet wide. This has been contracted to a narrow round arched doorway, placed out of the centre of the pointed arch, and continued as an arch through the thickness of the wall. At a later date the doorway has been still further contracted and lintelled over. Entering off the ingoing is a low chamber or guard-room, about 5 or 6 feet square. Although this rounded doorway is clearly an insertion, it has all the appearance of being of an early date. In the end wall facing the court-

yard, at the inner end of the entrance passage, there is a pointed archway (Figs. 60 and 62) also built up, and containing a late lintelled doorway. This archway is 9 feet wide, and possibly it represents the original entrance

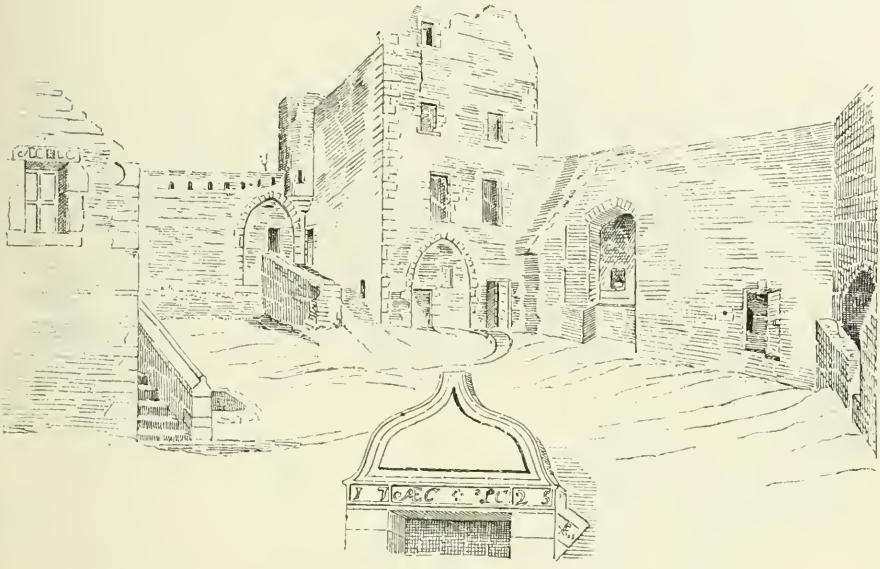


Fig. 62.—Dunstaffnage Castle. View in Courtyard.

to the courtyard through what may have been an oblong tower, somewhat on the lines of the sixteenth-century building now standing in this position. Right opposite the entrance at the north-west corner of the castle is the keep, circular to the outside, and set in a slight recess of the north and west curtains, and square to the courtyard, but with the inner angle rounded. Fig. 63 shows that the circular form of the tower on plan is contracted at the base against the north wall, that it spreads out somewhat in the middle, and attains its full circumference only towards the top. Over all, this tower measures about 28 feet by 25 feet. It stands upon the highest part of the rock, with its ground floor, about 6 feet above the courtyard, reached by a stair, of which the ruined foundation still exists, along the south face. At the head of this stair is the doorway, inside of which, in the thickness of the wall, a circled stair leads on the right to the floor above. Inside of this again on the left is a bar-hole for closing the inner door of the basement floor, which was probably used as a store for provisions.

The keep comprises three low stories, having arched recesses in the wall, with long narrow slits or loop-holes for light and defence. The centre, which is a mere well some 10 or 11 feet in diameter, was floored over with wood. The upper floor, which is entered from the battlements, is 6 or 7 feet wider than the ground floor, the walls being thinned off internally. The interior of the keep is too ruinous to enable one to say

anything certain about fireplaces, etc. The garde-robe flues exist outside, but their interior arrangements are gone. The tower at the north-east corner is, like the keep, circular in form towards the exterior of the castle,

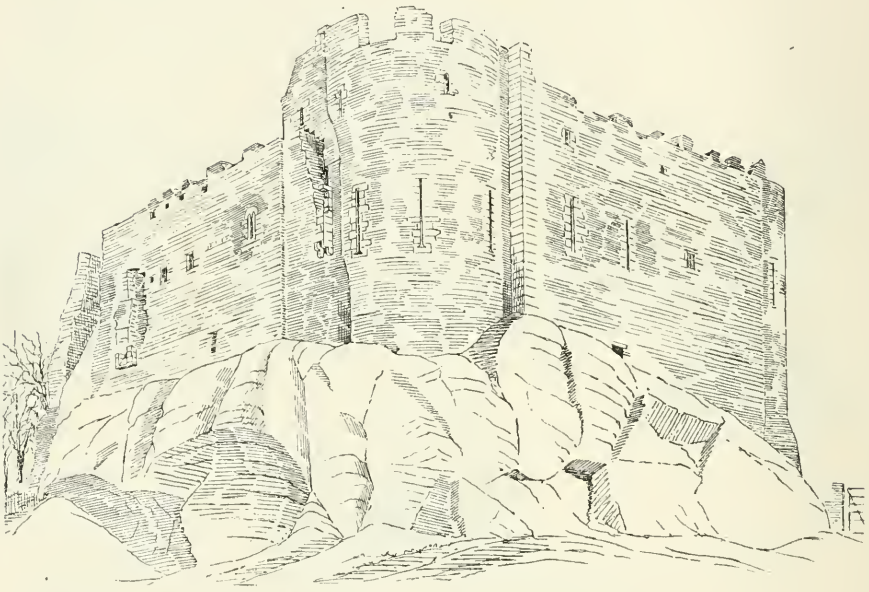


Fig. 63.—Dunstaffnage Castle from the West, showing Keep, etc.

and square inside the curtains. A large portion of its exterior wall has fallen inwards, and choked it up, so that not much can be ascertained as to its internal design. Its walls on the inside have evidently been stripped of the dressed stones, and probably this process hastened its fall. It is well worthy of being cleared out, and the broken wall restored. It had no direct door to the courtyard, having been entered from the battlements. As far as can be made out, it consisted of two floors, the undermost being some 7 or 8 feet below the level of the parapet walk.

Along the north curtain, between the keep and this round tower, there have been buildings. This space is at present partly occupied by a house of the eighteenth century. The large kitchen fireplace of this house is probably ancient, as are the garde-robes, sinks, and windows of the curtain. There is also a large fireplace in this north wall near the keep, which seems to indicate that here was the hall. Another row of buildings extended along the east curtain, with a fireplace in the square side of the north-east tower. The outer wall here bends inwards, and is thinned off from the inside ; and in all likelihood in the recess thus formed was placed the stair to the battlements, adjoining the round tower, which entered from them, as already mentioned. The two light lancet windows in this east curtain (Fig. 61) are built up, as well as a similar one in the north

curtain. In the south and west curtains there are mural chambers, or large recesses with long loops widely splayed to the inside.

The chamber in the semi-round south-west tower and the one adjoining in the south wall were enclosed to the courtyard, the doors opening inwards. The wall recesses are all a few feet above the courtyard, and have been enclosed, the base of the enclosing screen still existing, as shown on the plan, all along the west curtain. It is, however, doubtful if this enclosing wall is original. The base of a similar enclosing wall or screen exists along the east curtain also.

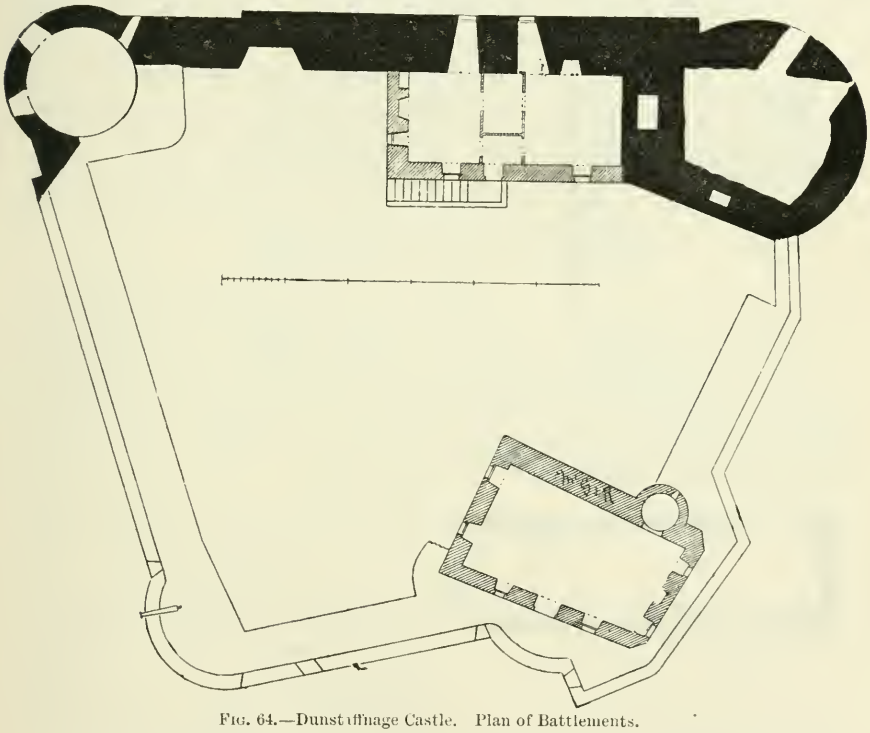


Fig. 64.—Dunstaffnage Castle. Plan of Battlements.

The oblong building at the entrance is mostly in the style of the sixteenth or seventeenth century. It is four stories high, with a low basement floor, having two squint shot-holes to the entrance passage. The first floor was reached by an outside stair along the north wall, the second by a wheel stair in the curtain, and from thence by a projecting corkscrew to the top. There is access from one of the floors to the battlement walk. At the west gable of this building, and between the entrance to the courtyard and the south curtain, and of later date than the latter, there is a mass of ruined masonry, the only probable explanation of which is that it supported another stair to the battlement walk.

The battlements (Fig. 64), which are in a ruinous state, have evidently

been altered for guns (as have also several of the openings in the walls), and three beautiful Spanish pieces, relics of the Armada, are lying on the top. A two-pronged iron stand (Fig. 65) fixed into a large stone, for holding a beacon light, stands on the battlements near the stair-turret of the south-east building.

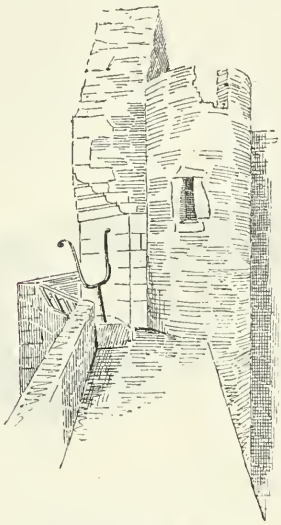


Fig. 65.—Dunstaffnage Castle. View on East Battlements.

The quaint eighteenth-century house along the north curtain is two stories high, with an outside stone stair to the upper floor, and an inside service stair of wood from the kitchen, now boarded over. In the upper floor the ceilings are coomed, and the walls and ceilings are lined with wood panelling, with mantelpieces also of wood, all in good style. The windows and door have O. G. pediments, carved with festoons, and the latter (Fig. 62) bears the date 1725 and the letters *Æ C* and *D L C*.

About 160 yards south-west from the castle is the chapel (Fig. 66). It measures 90 feet 7 inches long by 26 feet 6 inches wide, and is divided into nave and chancel; the latter is now walled up, and used as a private burying-ground. The east gable with its door and steps are entirely modern, but likely enough the gable is on the old foundation. The west gable has angle shafts at the corners. The walls exist to about their full height, and are encumbered with an extravagant growth of ivy, which prevents the beautiful details from being seen. The nave, used as a public burying-ground, is 67 feet long by 20 feet 4 inches wide. There are indications as of a porch near the west end of the south wall. The portion of the north wall opposite is ruinous. East of this on both walls are three narrow broadly-splayed lancet windows, the daylight measuring variously from $10\frac{3}{4}$ to $10\frac{1}{2}$ inches wide, and varying from about 6 feet to 8 feet high. The two pairs of lancets next the chancel (Fig. 67) have banded shafts, 6 feet $9\frac{1}{2}$ inches high by 5 inches diameter, with the ordinary Early English base and carved caps. The eastmost lancet in the south wall has a square abacus and dog-tooth ornament up the side of the end shafts, and it only has similar dog-tooth ornament round the outside splay. The jambs have bead and hollow mouldings continued round the arch. It should be added that the westmost of these windows

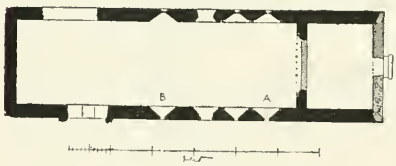


Fig. 66.—Plan of Chapel.

in the north wall is ruined at the top, and that the central window is not a lancet, but is round-headed. The west window in the south wall is also round-headed, and is without shafts, having mouldings only on the inner angle, but of a different section from those above described at B, Fig. 67. The other and opposite windows, which are also round-headed, are without shafts, and have mouldings only, but of a different section

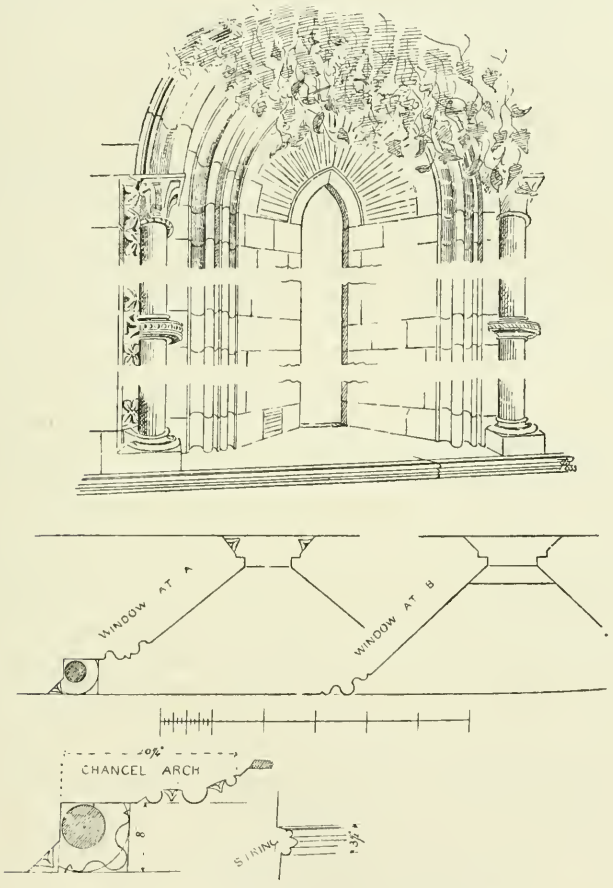


Fig. 67.—Dunstaffnage Castle. Details of Chapel.

from those just described. The square reveal of the window openings measures only 2 inches, with no groove for glass. Between these windows and the pairs just described are ruined round-arched recesses, of which nothing can be made. Running along the side walls inside, at about 3 feet 6 inches above the present floor level, and just beneath the windows, is a moulded string-course of the section shown.

The opening into the chancel, now built up, is adorned in a similar

style to the windows adjoining, only somewhat richer; and probably few things of this kind in Scotland have equalled it. It had beaded angle-shafts and elaborate mouldings with dog-tooth enrichments continuous on jamb and arch. The arch is gone, but it was doubtless semicircular. Of the chancel nothing can be said, as it is inaccessible. The side walls are evidently original, and there are no openings in them.

The fully developed Early Pointed style, of which this chapel is a fine example, prevailed in Scotland from about the middle of the thirteenth century till its close; and, inferring from its details, the erection of the chapel may be assigned to about the year 1250; and there is every probability, and almost certainty, that the castle is of the same age, and built by the same men. The peculiar widely-splayed windows of the chapel are to be seen in a very marked manner in the interior splays of many of the castle loops, where they are unaltered; and the Early Pointed lancets in the curtain walls, already referred to, point to the same conclusion, while the plan of the castle, with its round or partially rounded towers, forms an intermediate link between the simpler form of castle, like that of Kinclaven, and the completed style of the first period, like Bothwell and Kildrummie. We have also in the Introduction called attention to the resemblance between this castle and the walls and towers of St. André at Villeneuve, built about 1300. The latter, as seen from the south-west, has the same rounded angle containing a tower as we find at Dunstaffnage, and the walls of the enceinte are of the same plain and massive description. The long loops are also similar. It is remarkable to find such a striking similarity in castles so remotely situated from one another, although probably belonging to about the same period. The shape of the towers has been limited in both instances by the outline of the rock, which circumstance has prevented them from being built with the usual bold salient—such, for instance, as we see at Inverlochy. Tradition and legend carry Dunstaffnage back to a much remoter period, and probably the site early commended itself as a strong place. By nature it is so, and but little art would be required to render it almost impregnable against the simple modes of warfare practised in those times. If any earlier castle stood here, nothing of it now remains. While the existing castle was still new, in the year 1308, Bruce, as related by Barbour,

> "—— That stoute wes, stark, and bauld,
> Till Dunstaffynch rycht sturdely
> A sege set; and besyly
> Assaylit the castell it to get.
> And, in schort tym, he has thaim set
> In swilk thrang, that thar in war than,
> That magre tharis he it wan.
> And ane gud wardane tharin set;
> And betaucht hym bath men and met,
> Swa that he lang tyme thar mycht be,
> Magre thaim all off that countré."

By a charter which still exists, King Robert grants to Sir Arthur Campbell "the Constabulary of Dunstaffnage and the Maines thereof which Alexander Argyle had in his hands;" while David II., in the fourth year of his reign, dates a charter from Dunstaffnage. In 1455 Hume of Godscroft tells us that Earl Douglas "by flight got him to Dunstaffnage, where, finding Donald Earle Rosse, and Lord of the Isles, he incited him to make war against the King, James II., in his favours;" but whether this usurping and semi-independent chief was in possession of Dunstaffnage at this time is a disputed point. In 1490 James IV. seems to have twice visited Dunstaffnage in pursuance of his policy of winning the favour and of attaching to his interests, by personal intercourse, the wild western chiefs. Generally it may be said that the castle was held in the interest of the Sovereign, and this continued to be the case down to the period of the rebellion in 1715, and again in 1745, when troops were quartered within its walls. Now a small portion of it is occupied by one or two fishermen, who find its courtyard a convenient place for the peaceful occupation of mending their nets.

BOTHWELL CASTLE, Lanarkshire.

Of our thirteenth-century castles, Bothwell, on the Clyde, is the finest; indeed it is probably the grandest ruin of its kind in Scotland. This castle belonged in the thirteenth century to the De Moravia or Murray family. It was taken by Edward I., and by him given to Aymer de Valence, Earl of Pembroke, who was Governor of that part of Scotland. The castle seems to have been a good deal in the hands of the English till 1337, when it was taken by storm by the Scotch and dismantled. It afterwards passed to the Douglas family by marriage, and continued in their possession till their forfeiture under James II., in 1445. The castle is now the property of the Earl of Home.

Bothwell Castle is situated on a rocky promontory, having steep banks sloping on the south and west to the river Clyde, while on the east and north it was cut off from the adjoining level land by deep and wide ditches, the outline of which may still be traced.

This castle (like those of the corresponding period in France and England) consists of a great courtyard or bailey (Fig. 68), surrounded with high enclosing walls, strengthened at the corners with round and square towers, and provided with a great round donjon dominating the whole. The total length of the building is 325 feet, by 140 feet in width. The donjon (Fig. 68) is, as usual, situated on the enceinte, and is cut off from the court by its own ditch and parapet. The donjon and considerable portions of the south curtain and towers belong probably to the latter half of the thirteenth century. The masonry of these por-

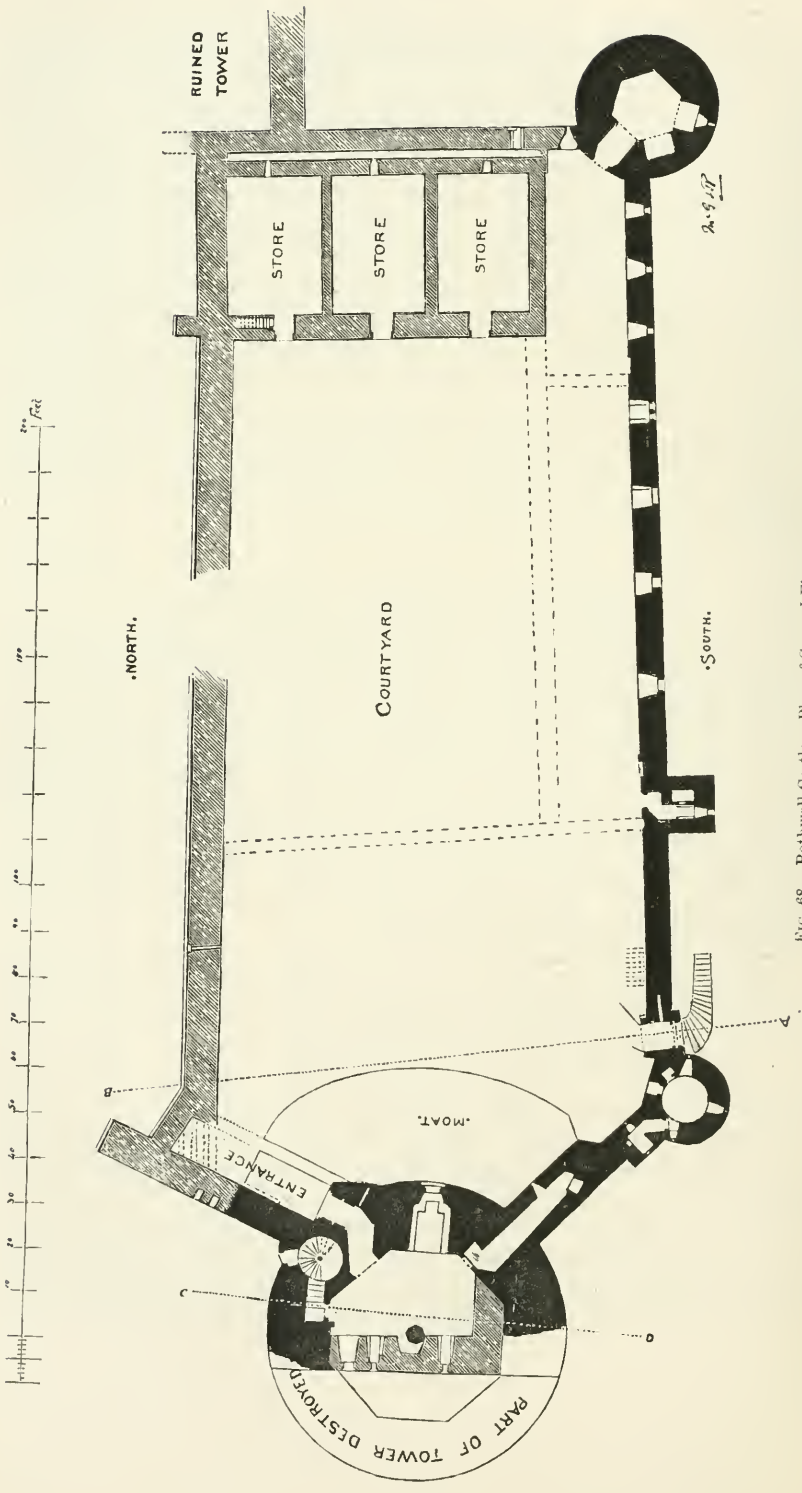


Fig. 68.—Bothwell Castle. Plan of Ground Floor.

tions is built with a fine red freestone, carefully dressed and regularly coursed.

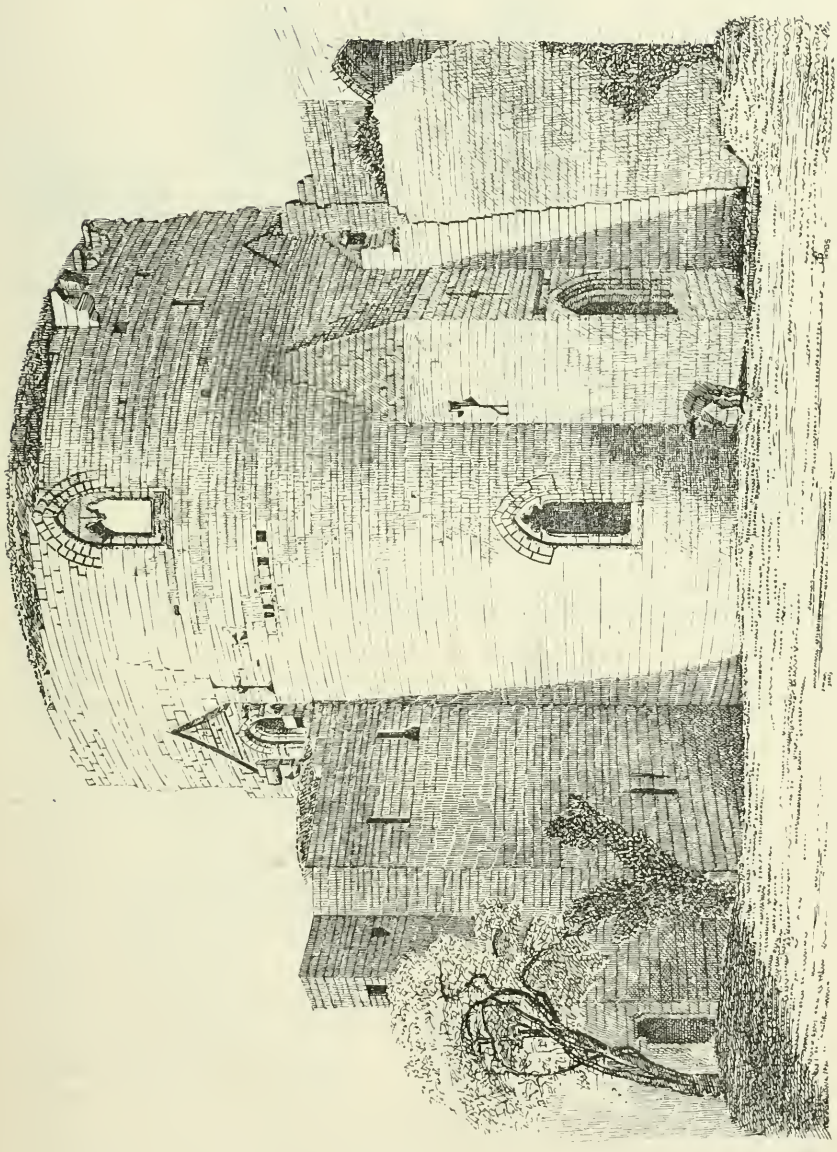


FIG. 69.—Bothwell Castle. View of Donjon from Courtyard.

The donjon (Figs. 69 and 70) is a noble tower, 65 feet in diameter, and 90 feet in height to top of parapet. The walls are 15 feet

thick, and the tower, which is circular externally, has been octagonal internally; but only four sides of the octagon now remain, the present western enclosing wall being a late addition.

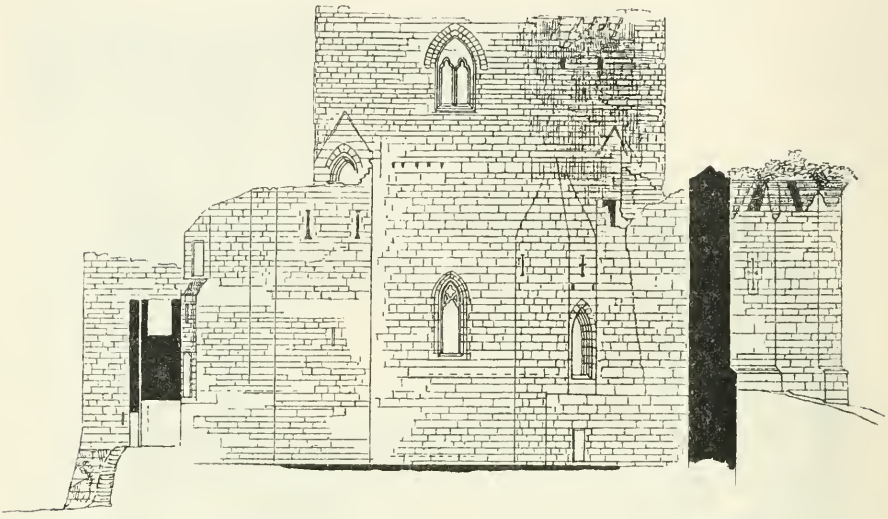


Fig. 70.—Bothwell Castle. Section through Courtyard on line A B on Plan, and Elevation of Donjon.

The story on the level of the courtyard (Fig. 72) had a wooden floor, carried by beams, which rested on a stone arch and a central pillar. The basement floor of the donjon (Fig. 71), which is below the level of the courtyard, is entered by a newel stair *from above only*. It evidently contained the stores of the keep. It also contains a draw-well of good design under the inner wall of the donjon (Fig. 73).

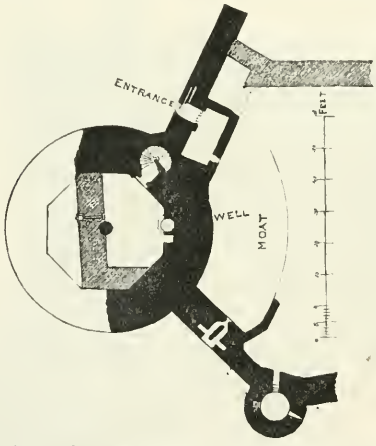


Fig. 71.—Bothwell Castle. Plan of Basement of Keep.

The floor above this forms the hall of the donjon. It was 37 feet in diameter and 22 feet high to the apex of the vault, which had moulded ribs springing from corbels in the angles of the octagon, and resting on the central pillar. The large window overlooking the court is enriched with tracery, and the ingoing has had nook shafts with carved caps and bases, and good simple arch moulds. The principal entrance is on the level of the floor, but 3 feet above the level of the court, and the entrance

passage is zigzagged for the purpose of defence. It is also provided

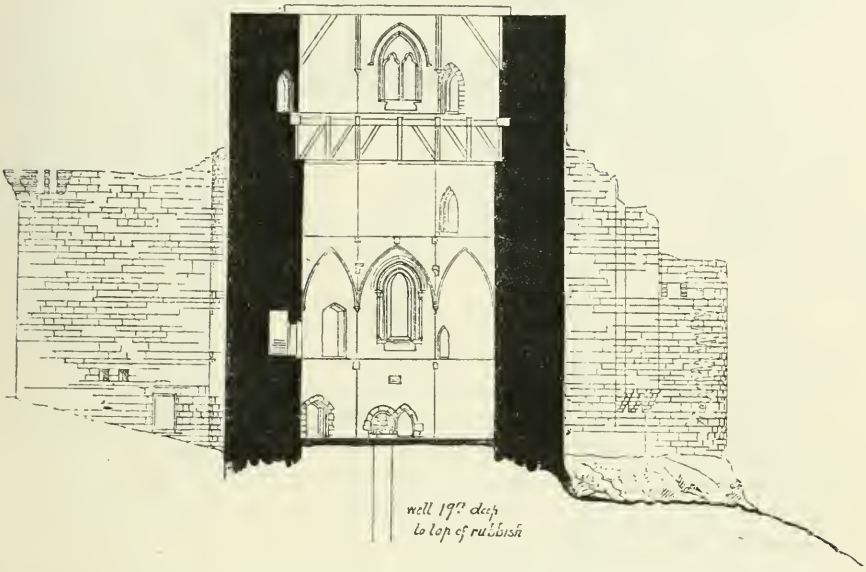


Fig. 72.—Bothwell Castle. Section through Donjon on line C D.

with a portcullis, which was worked from a small vaulted chamber above (Fig. 74). The way in which the circular outline of the keep

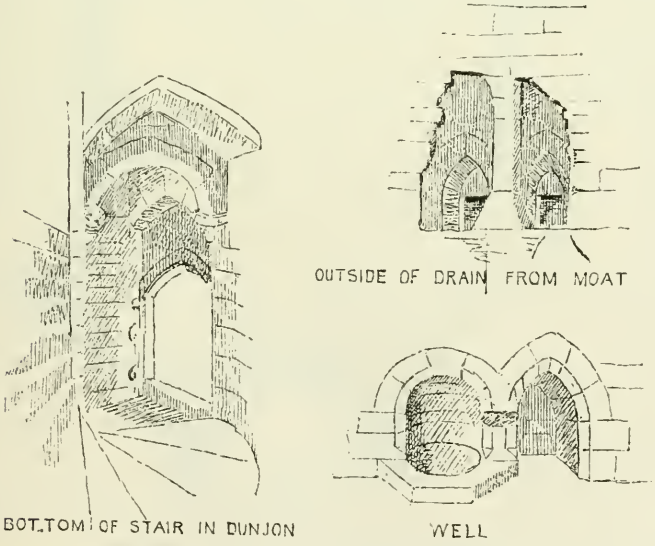


Fig. 73.—Bothwell Castle. Details of Donjon.

is broken with a spur to receive the entrance door and portcullis is

remarkable—as also the great stone corbels near the parapet (Fig. 70), evidently placed there to carry the defences sufficiently far out to clear the spur and protect the doorway. A drawbridge has also been worked from the portcullis room. This drawbridge was of the earlier description of these defences, which were raised by chains worked with a windlass, but without any of the balancing apparatus such as we see in another and later example in the same castle. Drawbridges of the latter kind were not attached to doorways, even in France, till about 1300.

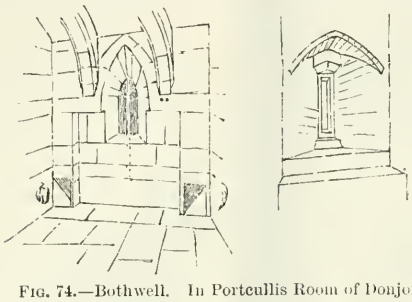


Fig. 74.—Bothwell. In Portcullis Room of Donjon.

The newel staircase leading down to the basement is also continued upwards to serve the upper floors and the roof of the donjon, and also the parapets of the curtains. It enters from the hall, not from the entrance passage, so that every one going in or out would be visible as he passed through the hall.

The first and second floors do not appear to have been vaulted, but to have had strongly framed and strutted floors, probably supported by the central pillar, continued up in wood (as suggested in the section). The first floor has no window to the court, and probably had only small loops to the exterior. This apartment seems to have been occupied by the garrison, and for the storing of munitions of war. It is on the level of the parapets of the curtains, and would thus form a convenient post for the soldiers. The top story has a fine pointed window to the court, divided by a central shaft into two lights with trefoiled heads. This was no doubt the private apartment of the lord and his family. The parapet is entirely gone, but must probably have been finished in a somewhat similar style to that of Coucy, *ante*, p. 37 (to which this castle has also other strong points of resemblance), and crowned with embrasures and crenellations. The corbels remaining over the spur of the doorway are similar to those of Coucy, and there was probably a row of smaller corbels at a higher level, on which wooden hoards would be supported when required. The large corbels over the doorway would receive larger and more projecting hoards, for the purpose of defending the doorway and also the entrance to the donjon from the parapet of the north curtain. It is worthy of note that the mother of Alexander III., who played a considerable part in Scottish history at this period, was Marie de Coucy, the sister of Enguerrand de Coucy, who built the great castle of Coucy, which Bothwell so strongly recalls in many of its features.

The roof of the donjon stair was no doubt continued higher than

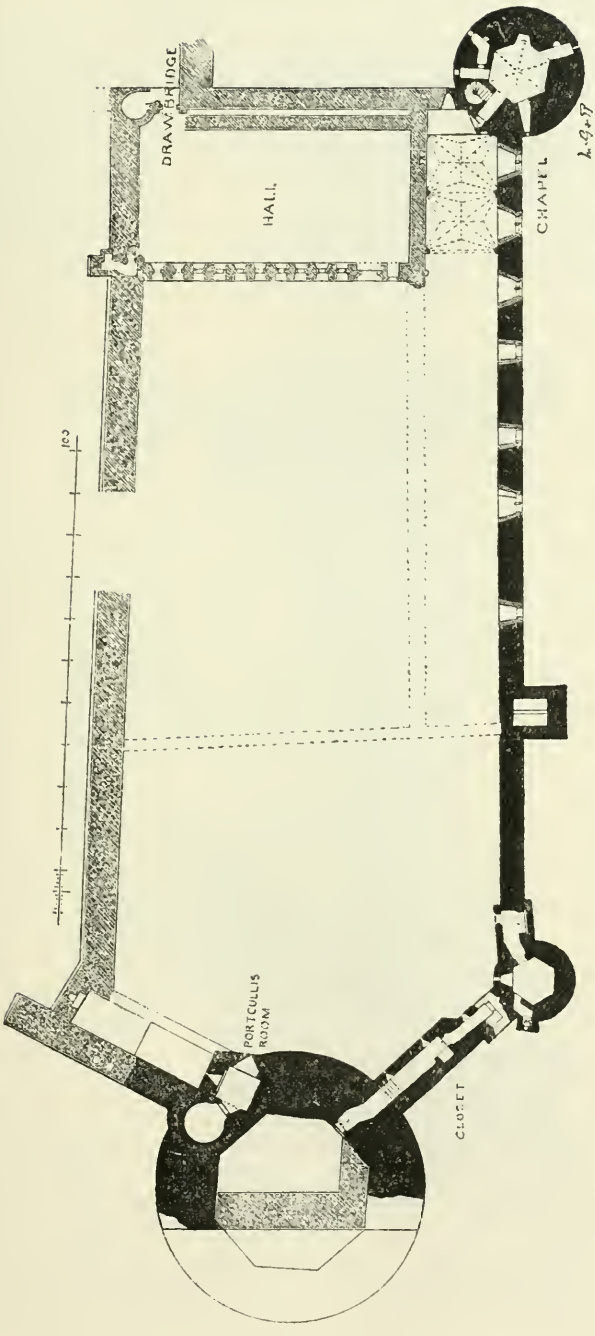


Fig. 75.—Bothwell Castle. Plan of First Floor.

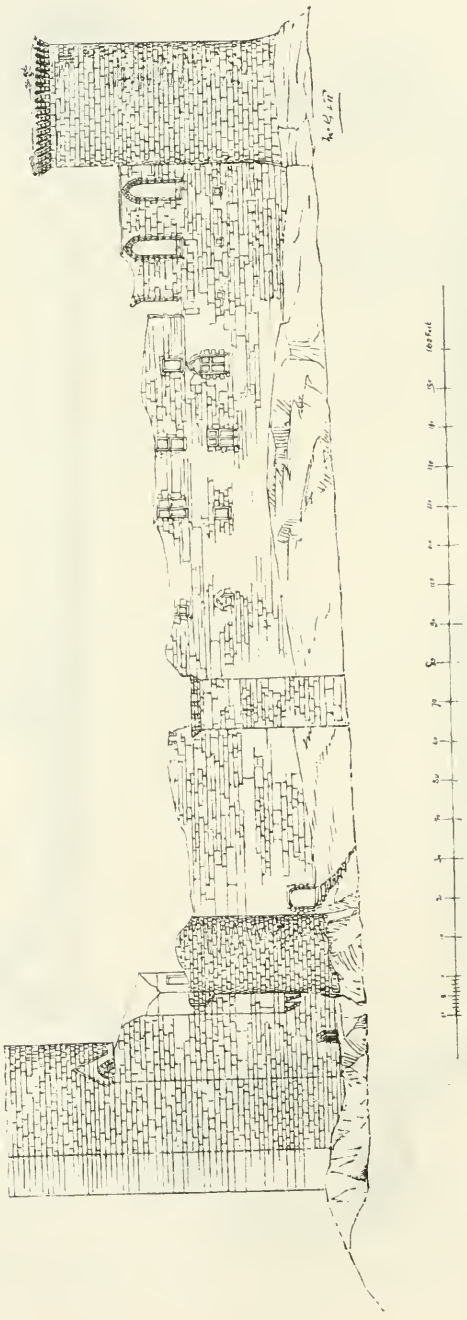


Fig. 76.—Bothwell Castle. South Elevation.

the parapet, and formed a lofty watch-tower. There is a communication from the donjon (Fig. 75) to passages in the thickness of the south curtain. These contain garde-robes. They also flank the donjon and enfilade the ditch from crosslet loops. The flues from these garde-robes descend in the thickness of the wall, and the arrangement for cleaning them out at the bottom is peculiar. A passage runs from the moat of the donjon through the wall (Fig. 69) where the flues reach the bottom, so that these may be washed out by water let off from the moat. But as the opening in the wall for this purpose might be taken advantage of for gaining access to the moat, the passage is divided, and carried

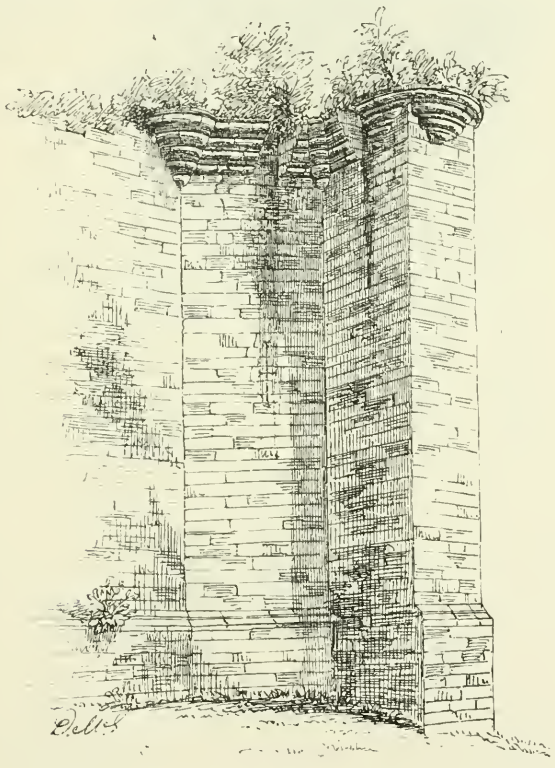


Fig. 77.—Bothwell Castle. Buttress at North-West Angle.

round a central pier, which completely blocks the entrance, and renders it impassable (Fig. 73). This arrangement shows that the moat was sometimes supplied with water, and probably explains the use of a large stone supply sink and drain in the north curtain wall. Rain-water from the roofs may have been collected by gutters and led to this trough, or water may have been carted from the exterior and poured

through the stone filler into it, and so carried by a drain to the moat, which in this way would be well washed out, and the waste water discharged through the aperture above described; or the water may have been stored in a tank, and occasionally let off through the moat, when both tank and moat would be cleaned out.

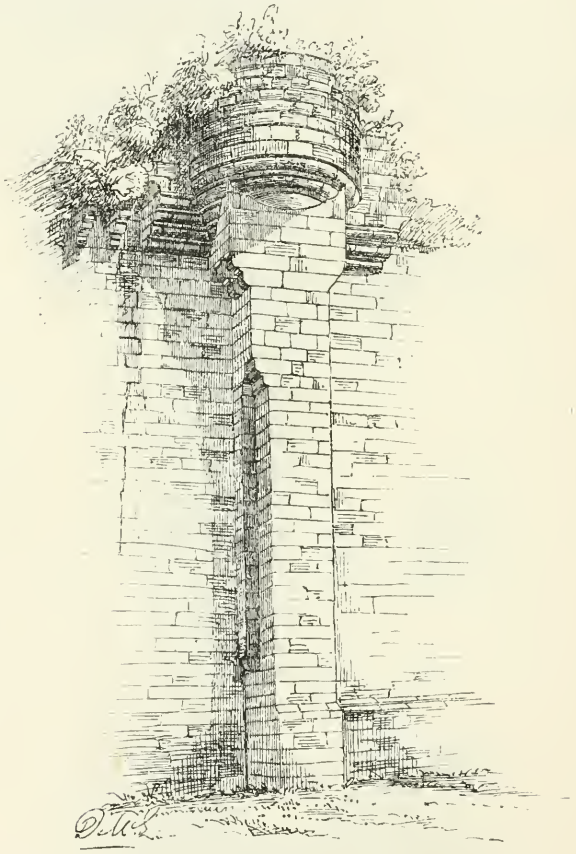


Fig. 78.—Bothwell Castle. Buttress at East End of North Wall.

There is a postern door from the moat leading to the external ditch (see Fig. 72), which has been provided with a portcullis, besides two doors with strong bars.

The two upper floors of the donjon (Fig. 75) communicate by the passages in the south curtain with the south parapet walks, but the communication is very strongly defended with doors and narrow sloping passages. There was usually in castles of this type a private way of escape from the donjon, and it seems in this case to have been by these passages to the parapet and tower adjoining, and thence by the

postern in the south wall. The doorway of this postern has been strongly defended with a portcullis, and it opens above a perpendicular rock 8 feet or 10 feet high (Fig. 76). The basement floor of the round tower adjoining has been the prison. It is provided with a garde-robe and a small aperture for ventilation at a high level. The upper floors of this tower and the portcullis chamber adjoining were entered by an outside stair, so that the only access to the south battlements is through this post, and the outside stair leading to it is thoroughly commanded from the battlement walk above. The remainder of the south curtain is defended by a square tower on the flank, and by a large round tower at the south-east corner (Figs. 75, 76). The curtain wall rises from a perpendicular rock 15 feet to 20 feet high, and there are no apertures in the

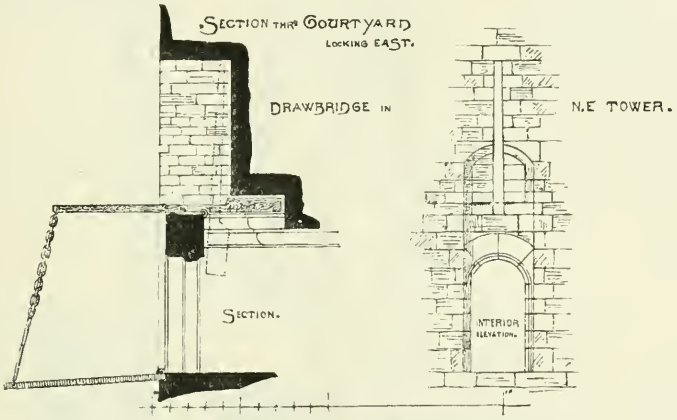


FIG. 79.—Section and Elevation of Doorway in North-East Tower.

lower part of the curtain. The upper part of the curtain, containing the windows of apartments and of the chapel was rebuilt about 1400. The south-east tower (Fig. 83) is a fine specimen of the architecture of the thirteenth century. It has no stair from the ground floor, the entrance being on the first floor, where a newel stair begins, and runs to the roof. The upper part of this tower, with the beautiful corbelling of its machicolations, is considerably later than the donjon, probably of the same date as the hall and chapel adjoining. The various towers round the enceinte were within recent times known by the names of the "Valence Tower," the "Douglas Tower," the "Hamilton Tower," etc., from which it may perhaps be inferred that Aymer de Valence may have added to the castle during the English occupation.

The castle must have suffered greatly during the War of Independence, when it frequently changed hands, and (as we have seen) was dismantled in 1377.

After this demolition, the north and east curtains have evidently been

rebuilt towards the end of the fourteenth century, or the beginning of the fifteenth century. The style of the masonry is greatly inferior to the early work, and the junctions of the new and old work are distinctly traceable. The forms of the flanking buttresses, with their corbelling and overhanging turrets, also indicate the above period (Figs. 77 and 78).

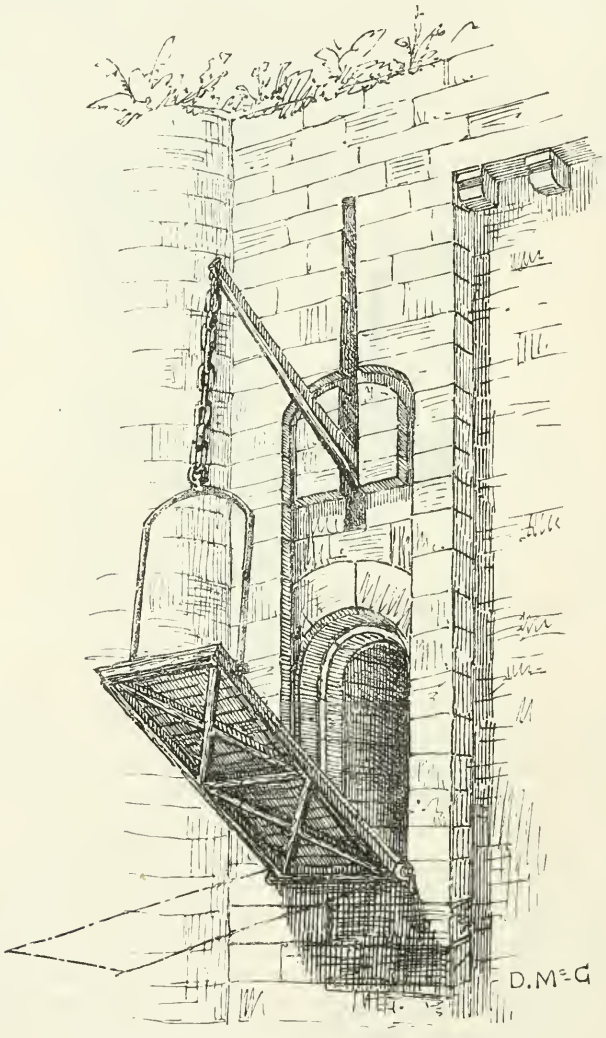


Fig. 80.—View of Drawbridge in North-East Tower (restored).

The north-east tower was square, and has been large and strong, in order to protect this, which may be considered the weakest point of the enceinte. This tower is now greatly ruined, but in Slezer's view,

published in 1693, it is shown complete, and crowned with a corbelled parapet having turrets at the angles. These are in the style of the fifteenth century, and may have been additions. There is here a unique example of the employment of a drawbridge (Figs. 79 and 80) on the *inside* door of this tower, which evidently formed part of the original building before the hall and other parts were erected in the courtyard. This illustrates what was pointed out in connection with the French castles, viz., that at this period each tower formed an independent post. The object here clearly was, in case of the enemy obtaining possession of the courtyard, to cut the besiegers off, by raising the drawbridge, from all access to the north-east tower or the

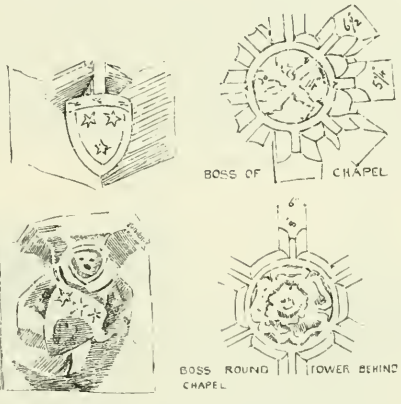


Fig. 81.—Details from Chapel.

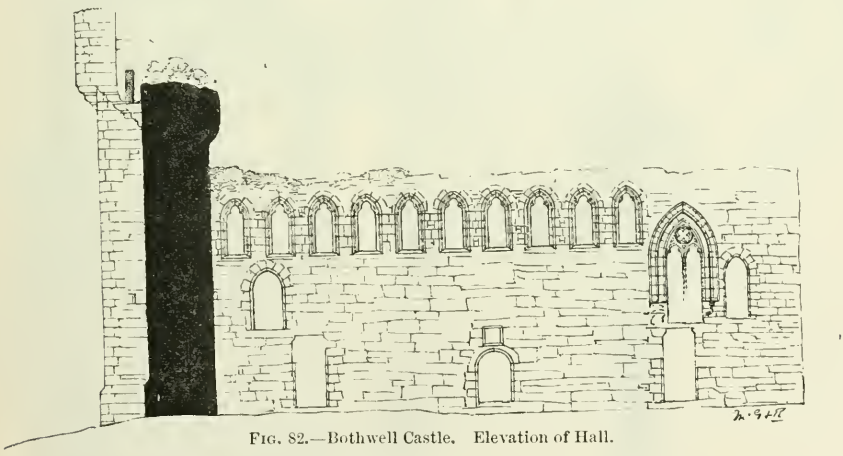


Fig. 82.—Bothwell Castle. Elevation of Hall.

battlements of enceinte, all of which would continue the defence till separately reduced. As above mentioned, this drawbridge shows the later form of these defences, careful provision being made in the masonry for the counterpoise, etc. This specimen is quite unique in Scotland.

This important castle also beautifully illustrates the period in castellated architecture when the lords, tired of the narrow bounds of their donjons, built themselves spacious halls and residences round the enceinte. We have here a fine example of this change of manners in the great hall

(65 feet long by 32 feet wide), the chapel, and other buildings erected within the enceinte. These were no doubt constructed by the Douglases while they held the castle, as is apparent from the Douglas arms being carved in different places (Fig. 81). It is most likely that they were built by Earl Archibald the Grim, about 1400. The mouldings and enrichments correspond with those of the churches of that date, such as St. Bride's Chapel at Bothwell, which was founded by Archibald the Grim in 1398, and bears his arms, and Lincluden College, Dumfries, which was also rebuilt by him.

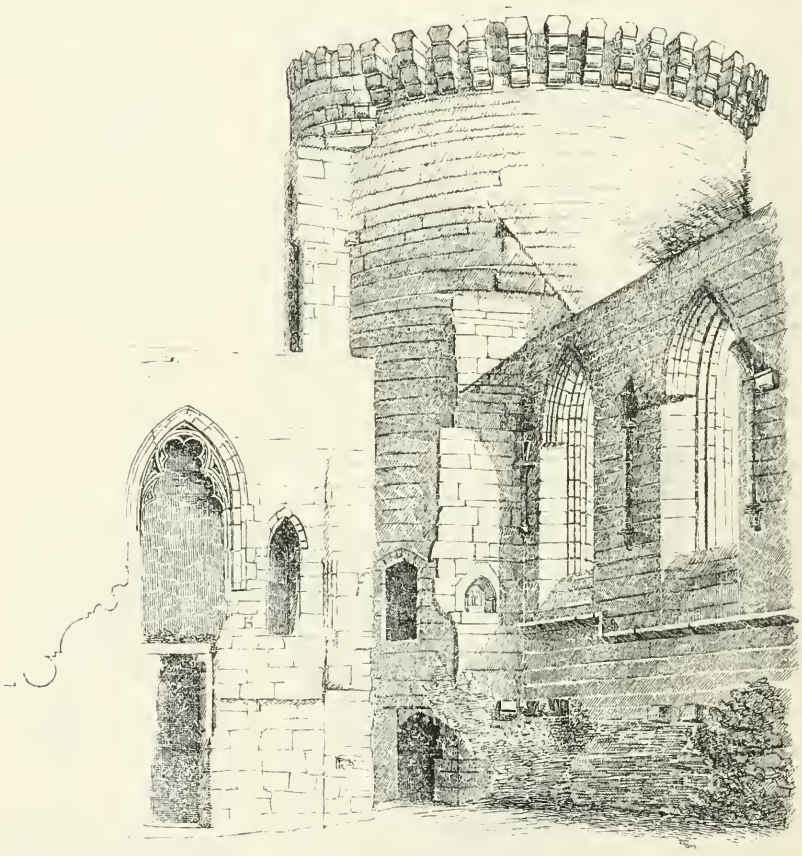


Fig. 83.—Bothwell Castle. View of Chapel, South-East Tower, and Window and Door in Hall.

The hall is on the first floor, with vaulted cellars beneath. The east wall is built independently of the curtain, and about 18 inches from it, probably from a desire not to weaken the curtain, and also, perhaps, to secure a private passage along it. From the height of the sills of the windows in the west wall (Fig. 82), there would appear to have been a

corridor running along the west side of the hall, with the roof resting against it. Some remains of the stair at the north end leading to the corridor (Fig. 84) existed within recent years, but are now removed. The south, or dais end, has a fine window with tracery (Fig. 83), and a door communicating with a corridor leading to the chapel and private apartments along the south wall, of which the windows are visible in the south elevation (Fig. 76). The two eastern bays of the chapel (Figs. 75, 83)

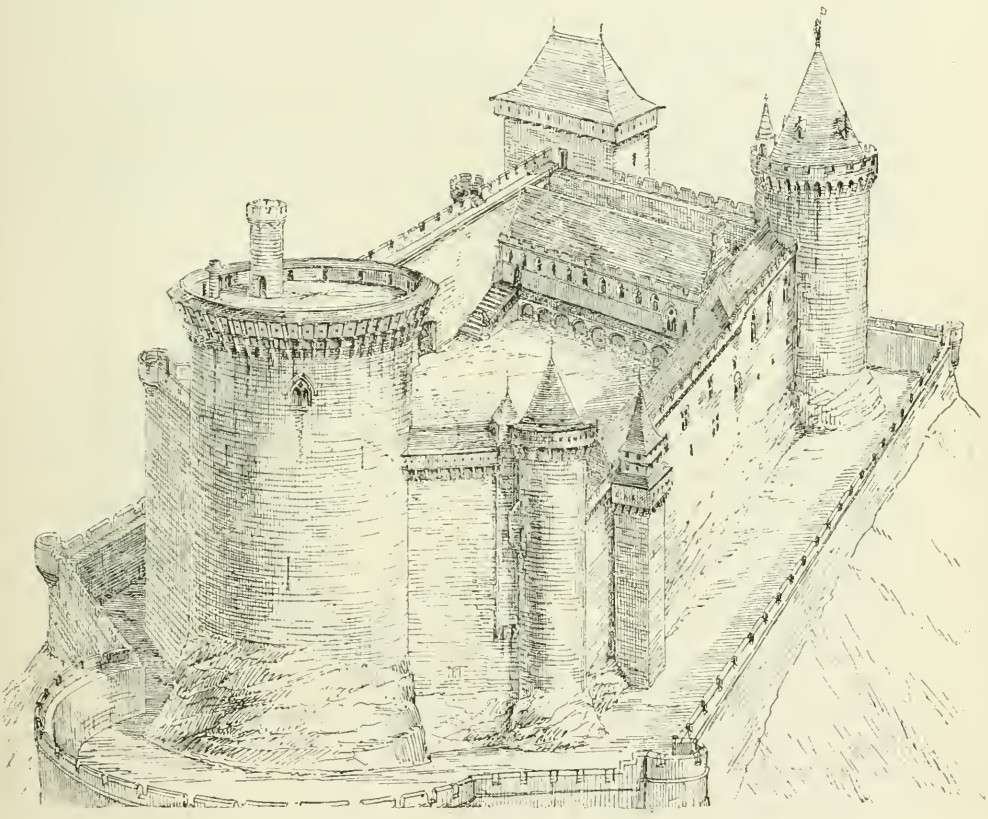


Fig. 84.—Bothwell Castle. Suggested Restoration.

are 32 feet long and 18 feet wide, and have been roofed with groined vaulting; some of the vaulting shafts and carved work still remain, as also a double piscina at the east end. The chapel extended one bay westwards. This bay seems to have had a plain barrel vault, and contained the entrance doorway (one jamb of which still remains) and a holy-water stoup in the north wall and a window similar to that of the two eastern bays in the south wall. The kitchen and offices were

probably under the chapel and hall, and there appears to have been the usual screen with a gallery at the north end of the hall. It is curious that there is no trace of a fireplace in this great hall, but it has probably been carried off, as being too good to be left, and has disappeared. The fireplace of the great hall at Doune has met with a similar fate. At Dunblane, Craigmillar, and elsewhere, the jambs of fine old ornamental fireplaces and other carved work may be seen utilised as gateposts to gardens, farm-steadings, etc. There were also domestic buildings with windows in the south curtain, along the south side of the courtyard.

Unfortunately all trace of the main gateway to the castle has disappeared. It seems most likely that it was situated at the gap in the north curtain, where the wall is demolished, and would probably be defended with towers. There would also be a drawbridge over the moat, and possibly a fortified gatehouse or barbican beyond. Fig. 84 represents the supposed appearance of Bothwell Castle after its restoration by Archibald the Grim about the year 1400.

KILDRUMMIE CASTLE, Aberdeenshire.

Bothwell Castle, as above mentioned, was built by the Murrays. It is not a little remarkable that another of the great thirteenth-century castles, still partly preserved, was also erected by a Murray.

Kildrummie, in Aberdeenshire, one of the largest castles in Scotland, was built by Gilbert de Moravia, Bishop of Caithness, in the reign of Alexander II. This castle is situated near the river Don, and occupies a very strong position on the top of a high bank which slopes steeply down to a rivulet on the north and west sides, while on the east and south the castle was protected by a deep fosse, the eastern portion of which still remains. It resembles Bothwell in general design. In plan (Fig. 85) it is an irregular quadrangle (the south side bulging out in the centre towards the gateway), and had high curtain walls enclosing the enceinte, flanked by six round towers at the angles and gateway. One of these, called the Snow Tower, situated at the north-west angle, was of great size, being 53 feet in diameter, and no doubt formed the donjon. It also contained a draw-well. The walls of this tower are now only a few feet in height.

The castle measures 200 feet in length along the north front, by 175 feet in breadth, exclusive of the towers. The entrance-gate was on the south, and appears to have been flanked by two towers, now entirely demolished. Immediately opposite the gateway there is a great hall, 73 feet by 41 feet built against the north wall, with four windows overlooking the valley to the north (Fig. 86). Unfortunately the buildings within the enceinte are almost entirely demolished. The walls of the block con-

taining the hall are the best-preserved portion, and they are for the most part only about 5 feet high. The south wall shows remains of four loops which lighted the basement, the hall being on the first floor. The floor of the hall seems to have been of wood, as there is no indication of the basement having been vaulted. The chapel is conspicuous (Figs. 87, 88, and 88A), with its three tall lancet windows, in its only remaining wall to the east. These from their style are undoubtedly thirteenth-century work, and must have formed part of the original

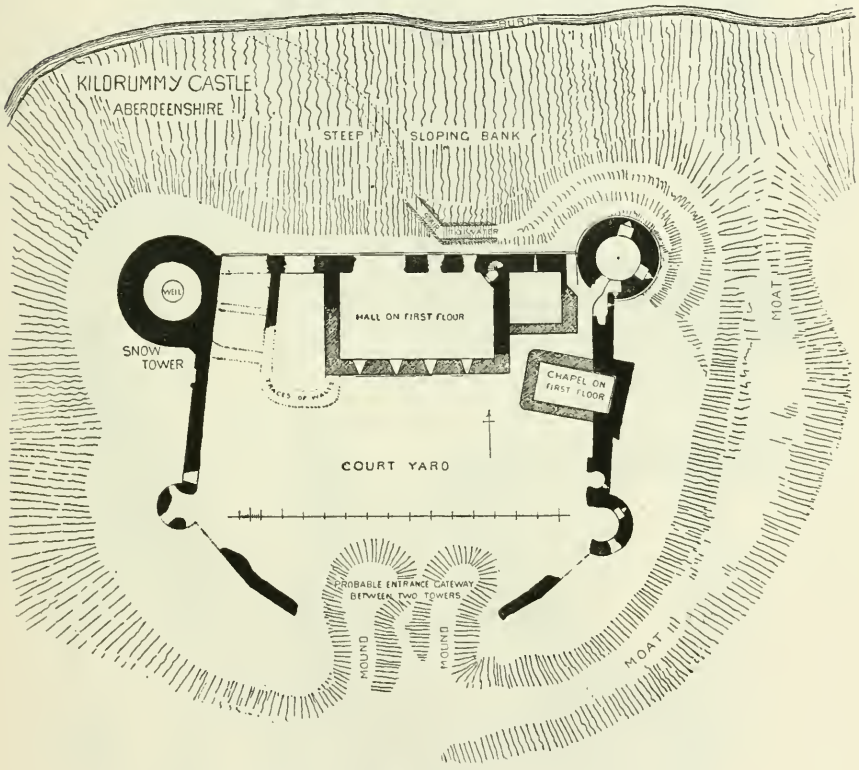


FIG. 85.—Kildrummie Castle. Ground Plan.

building. As at Bothwell, the chapel has been larger than in the later castles, measuring about 35 feet by 20 feet. The masonry of the buildings generally is built with the finely dressed and coursed ashlar characteristic of the period. It is of freestone, which must have been brought from a considerable distance, as there is none in Aberdeenshire. The form of the windows in the north-east tower (Figs. 86, 87) is unusual, and seems to point to the English occupation for its origin, being the

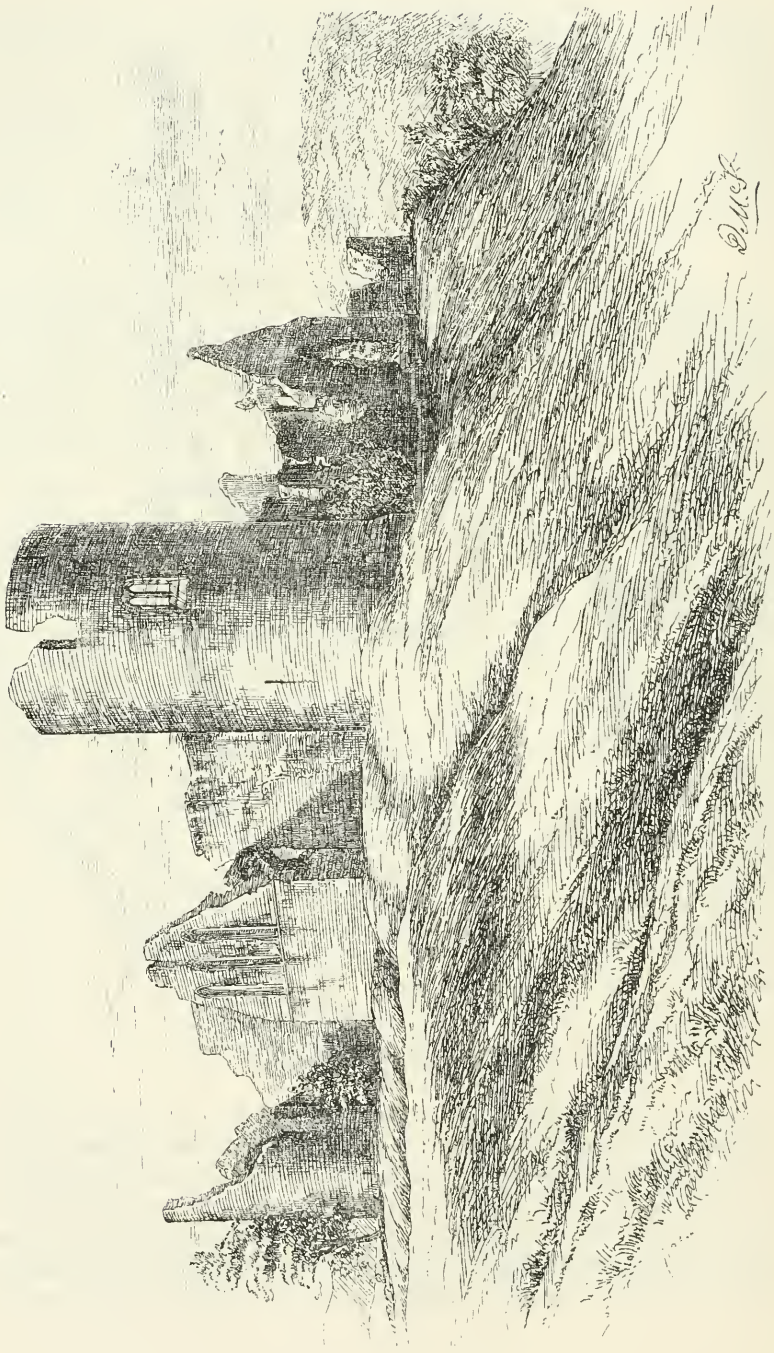


FIG. 86.—Kildrummie Castle from the North-East.

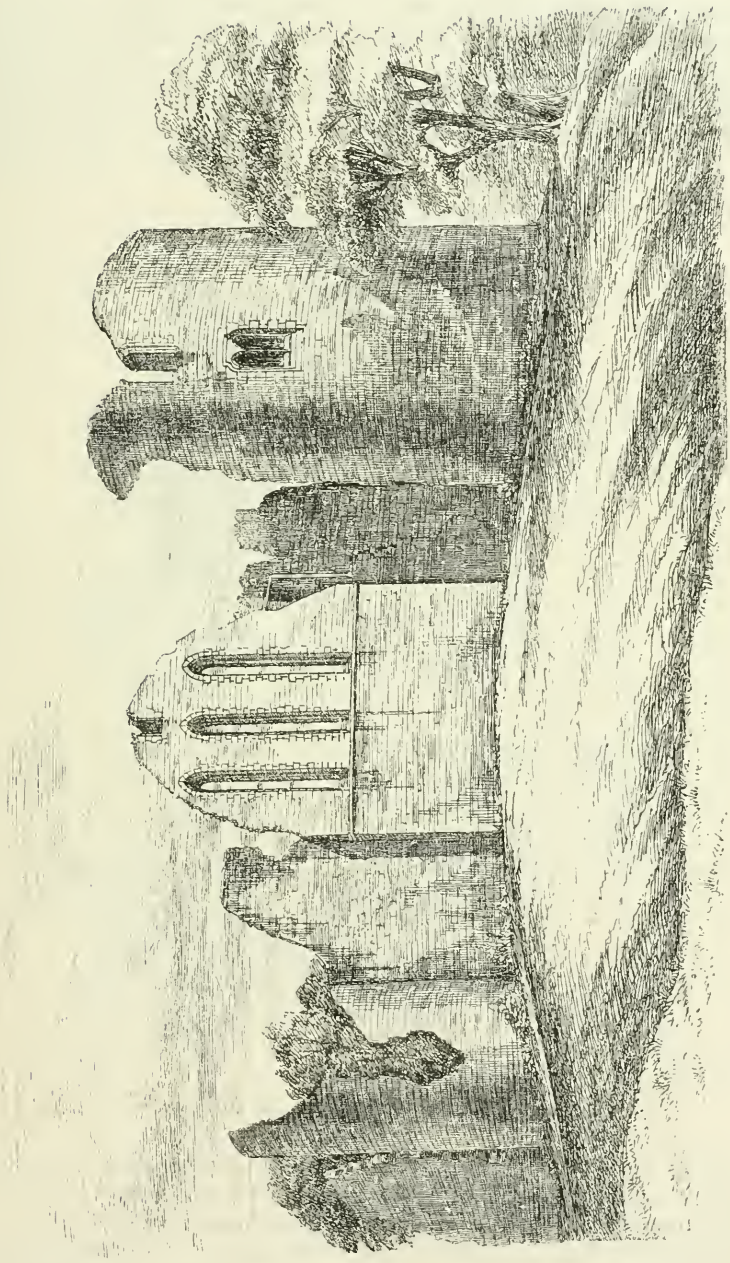


FIG. 87.—Kildrummie Castle from the South-East.

square-headed trefoil so commonly adopted in the Edwardian Castles. A great deal has been written about a subterranean passage supposed to exist in connection with the outworks. All that can now be seen is the remains of a stone staircase leading from a small postern in the north wall, to what was evidently an underground passage. This may have been for access to the stream below for water, or it may have been in connec-

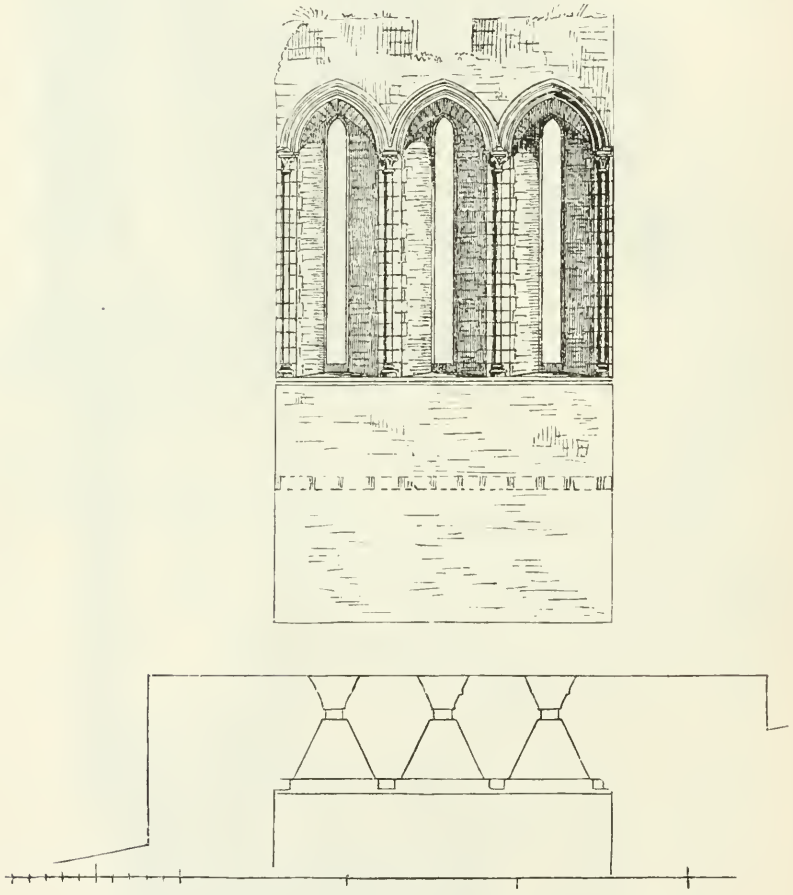


Fig. 88.—Kildrummie. Plan and Interior Elevation of East End of Chapel.

tion with the defences. Similar subterranean passages have been mentioned as occurring at Arques, Dover, and other castles, and we shall meet with further examples at Yester Castle, East Lothian.

This castle passed through many vicissitudes. It was besieged by Edward I. in 1306, and yielded in consequence of a great conflagration,

when Nigel Bruce, the King's brother, fell into Edward's hands. Some of the buildings, no doubt, date from that period, when it was probably restored by the English; and when the square-headed trefoil, above referred to as characteristic of English domestic work, was introduced. Amongst other strange changes of fortune, Kildrummie was bestowed by James III. on his favourite, Robert Cochrane, the architect, who was hanged at Lauder Bridge.

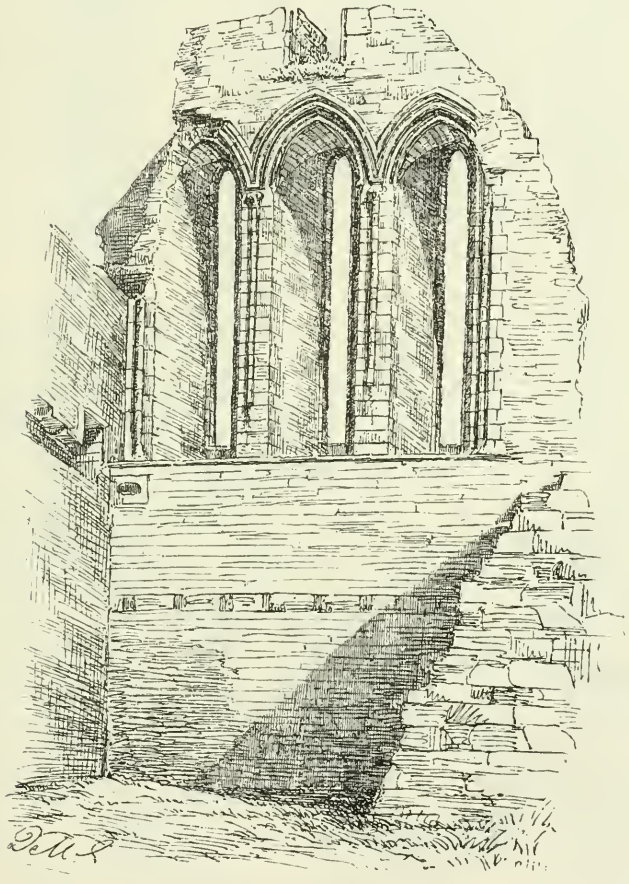


Fig. 88A.—Kildrummie. View of Interior of Chapel.

The following three examples, viz., Dirleton Castle, Yester Castle, and Hailes Castle, all in East Lothian, contain considerable remains of thirteenth-century work.

DIRLETON CASTLE, Haddingtonshire.

Dirleton, now the property of Lady Mary Nisbet Hamilton, was a strong castle at the time of Edward the First's invasion in 1297, and it

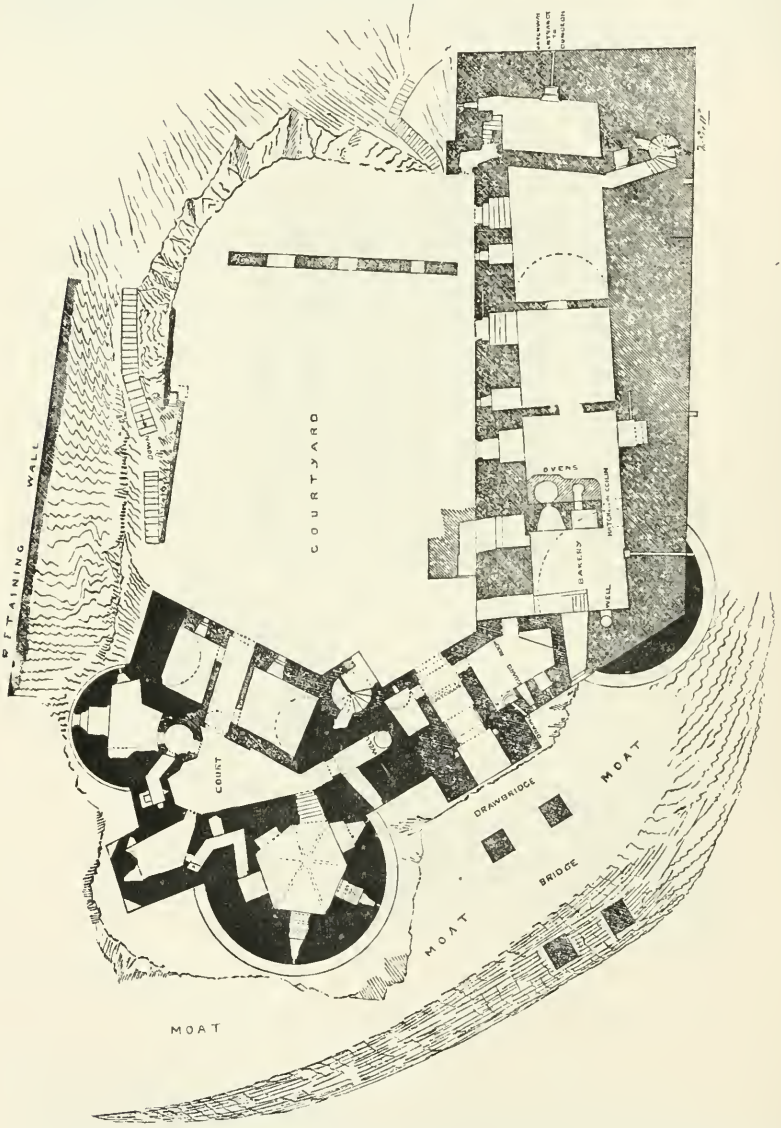


Fig. 89.—Dirleton Castle. Plan of Basement.

then stood a famous siege by Bishop Anthony Beck. It appears to have been built by the Devaux or De Valibus family. After being taken by

Beck, the castle was demolished, the only portions which seem to have been left standing being the south-west towers, two of them round, the other square (Figs. 89, 90), with the adjoining walls, and the lower part of the south-east tower. These portions, which are shaded black on the plan, were undoubtedly parts of the thirteenth century castle. They still exist, having been incorporated in the buildings of the castle when re-erected a century later. The newer buildings most probably show the extent of the old castle, as the outline of the rock which forms the site naturally

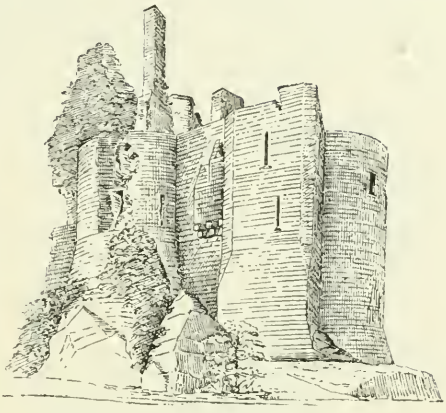


Fig. 90.—Dirleton Castle from the West.

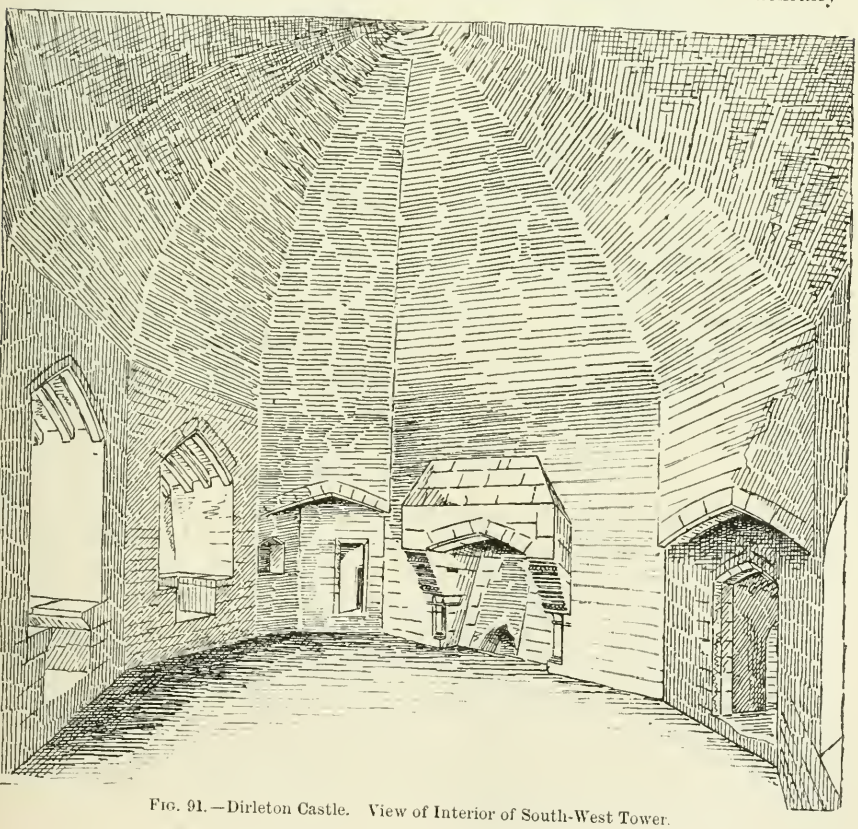


Fig. 91.—Dirleton Castle. View of Interior of South-West Tower.

defines the shape and extent of the fortress. This rock is not high, but stands clear above the general level, while the deep moat sunk around it added considerably to its elevation, and the rocky nature of the foundations rendered the walls safe against the operations of the miner. The original castle evidently had the lofty curtains and round towers which distinguished the thirteenth century. The south-west towers and adjoining walls are all of the solid ashlar-work then used, and the rooms were lighted only with narrow loop-holes,—the present windows in the upper floor having been enlarged at a later period. The apartments in this circular tower (Fig. 91) are multangular internally (like the Keep of Bothwell), and vaulted with a rude multangular dome, without ribs in the angles, such as are shown in Billings' view. The fireplaces are enriched, the dog-tooth and other mouldings indicating Early English or thirteenth-century work (Fig. 92).

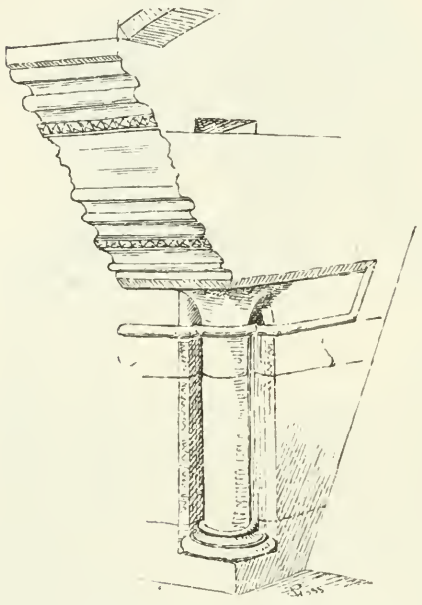


Fig. 92.—Dirleton Castle. Details of Fireplace in South-West Tower.

The battered basement wall of the south-east tower still exists, and has been utilised in the re-erection of the castle (see Plan).

The other portions of this castle belong to a later period, and will be referred to hereafter.

YESTER CASTLE, Haddingtonshire.

The Castle of Yester belonged to the Gifford family, and was erected (according to Cosmo Innes) in 1268. It is now the property of the Marquis of Tweeddale. This castle is situated on a high triangular promontory at the junction of the Hopes Water and a smaller burn, the banks of which are precipitous, while the site is cut off from the adjoining land on the third side by a great fosse, about 50 feet wide and 20 feet deep. The general plan of the site (Fig. 93) is thus triangular. The walls were lofty, those still remaining being about 40 feet high and 6 feet 6 inches thick (Fig. 94). Of these the only portions now standing are the northern angle and part of the east flank, but the general plan may be traced from the ruins of the foundations.

The northern wall, or that nearest the point of the triangle, is a curtain without flanking towers, and without any openings except a small

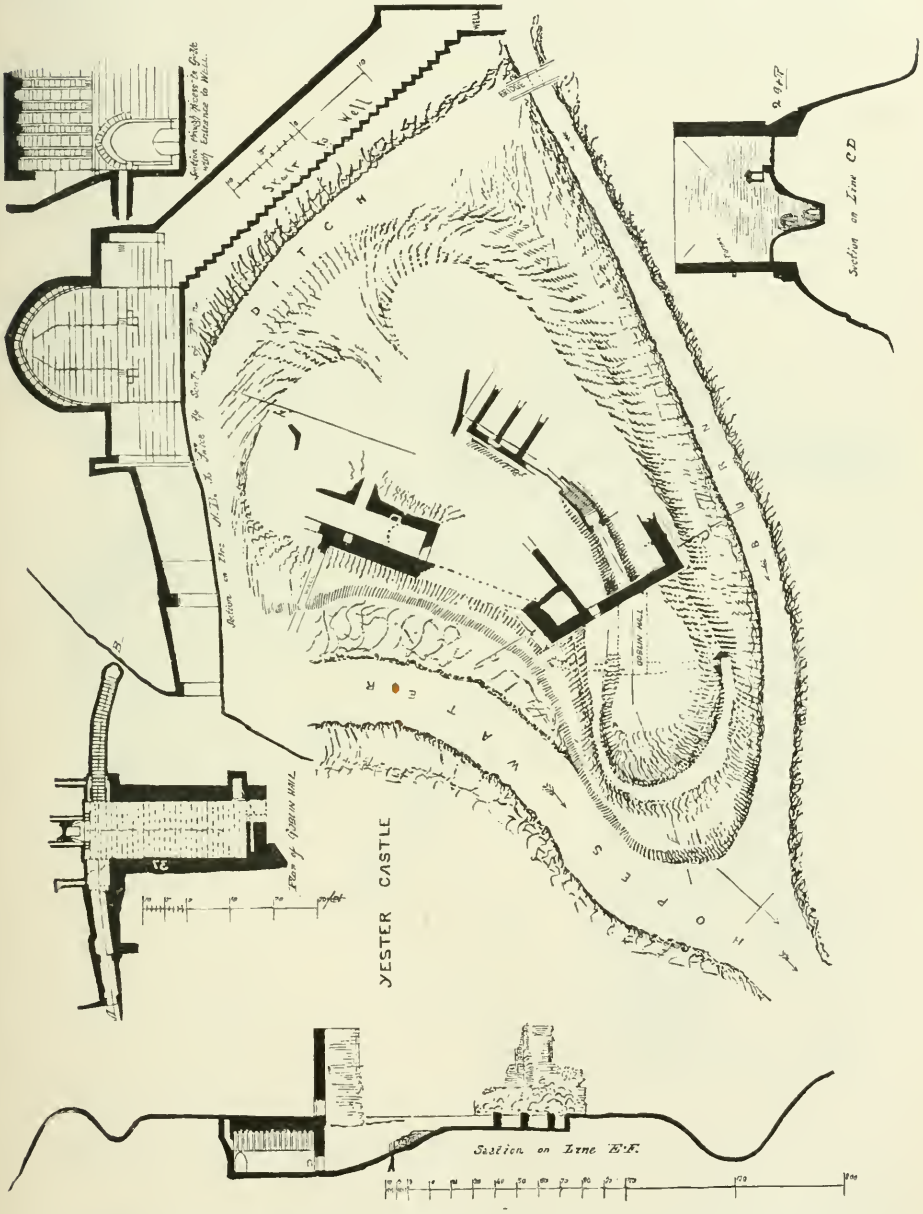


FIG. 93.—Yester Castle. General Plan.

postern door. Returning portions of the east and west curtains branch off from the northern wall.

There appear to have been buildings on each side of the central courtyard, with sloping roofs resting against the curtains, the chases for which are seen in the north wall. A piscina or basin is visible in the upper floor of the west wall, with a drain to the outside. The postern

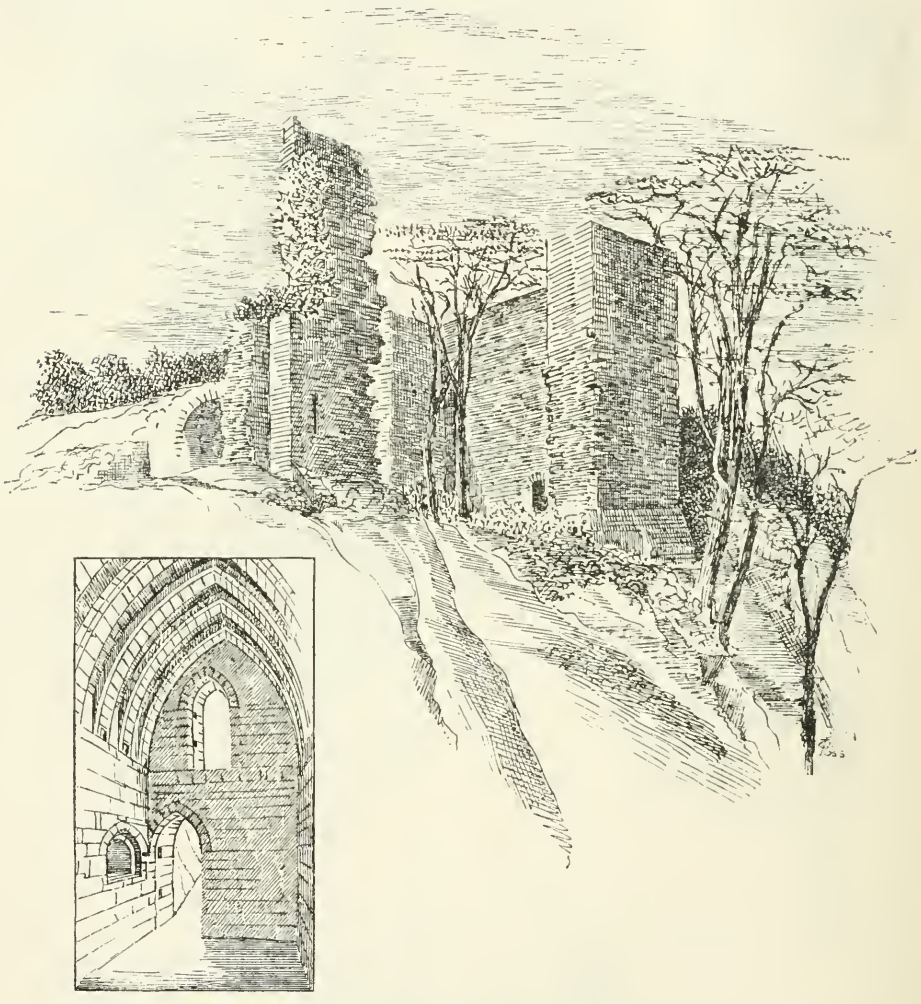


Fig. 94.—Yester Castle. View of East and North Walls and Subterranean Chamber, looking South.

door in the north wall leads to a small open piece of ground at the point of the promontory, on which there may have stood a tower or detached work for defence.

The principal gateway was evidently at the south side of the enceinte, and seems to have been defended by two towers; there is also a round

arched bridge across the small burn near this point, showing that the approach to the castle was in this position. This bridge is built with carefully-dressed masonry in regular courses, and is certainly of old date. The parapet has been renewed in a less careful manner in 1717, a stone inserted in it bearing that date, with the letters $\frac{M}{S.T}$ (probably for the Marquess of Tweeddale). A wall seems to have run from the south-east corner tower of the enceinte down to the Hopes Burn as an additional protection. The part of the wall of enceinte which remains on the east side is about 50 feet long and at least 30 feet high. The ground-floor at this point contained a semicircular vaulted chamber, above which has apparently been the hall. But this part of the building is of later date, probably fifteenth century, to judge from the mouldings of a window on the upper floor. A peculiar feature in this hall is a large window in the back of the huge vent of the fireplace, the sill being about 6 feet above the floor.

But the most remarkable building connected with the castle is a subterranean chamber, having underground passages cut in the rock, leading from it, popularly known as "The Goblin Hall," and so named on the plan and sections (Fig. 93). This underground chamber is the hall referred to by Sir Walter Scott in the "Host's Tale" in *Marmion*. It is entered from the castle by a long straight flight of steps, with doorways in the centre as well as the top and bottom, which have been defended with strong bars against entrance from the exterior. The chamber is situated immediately outside the north wall of the castle, below the open ground above referred to. Its position is shown by dotted lines on the plan and by the sections (Fig. 93). It is 37 feet long by 13 feet wide, and is vaulted with a pointed tunnel vault (Fig. 95) 19 feet high to apex, strengthened with numerous broad splayed ribs. This chamber was divided into two stories in the height, with a wooden floor at the level of the springing of the vault. The apertures for the joists, and portions of the joists themselves, are still apparent. There is a door to the upper floor (see sketch, Fig. 94) under the castle wall, nearly above that to the lower floor, and there must have been a passage to this door from the central landing of the stair. At the north end of the chamber (see enlarged plan and section A B, Fig. 93) there is a passage with a pointed vault cut through the rock, which leads westwards to the outside about half-way down the slope of the precipitous bank of the stream. This passage is 33 feet 6 inches long. It has a considerable slope downwards towards the outside, and is defended by three doors, with strong sliding bars, the iron door at the outside being 4 feet 4 inches high, and 2 feet 6 inches wide. The inner door seems to have been provided with a portcullis.

A similar passage was begun to be formed on the opposite side of the chamber, and a doorway (see plan and section, Fig. 93) with slots for sliding bars is there built, but it leads only to a face of solid rock. The constructors seem to have changed their mind, and, stopping operations in this direction, proceeded to cut a descending staircase through the

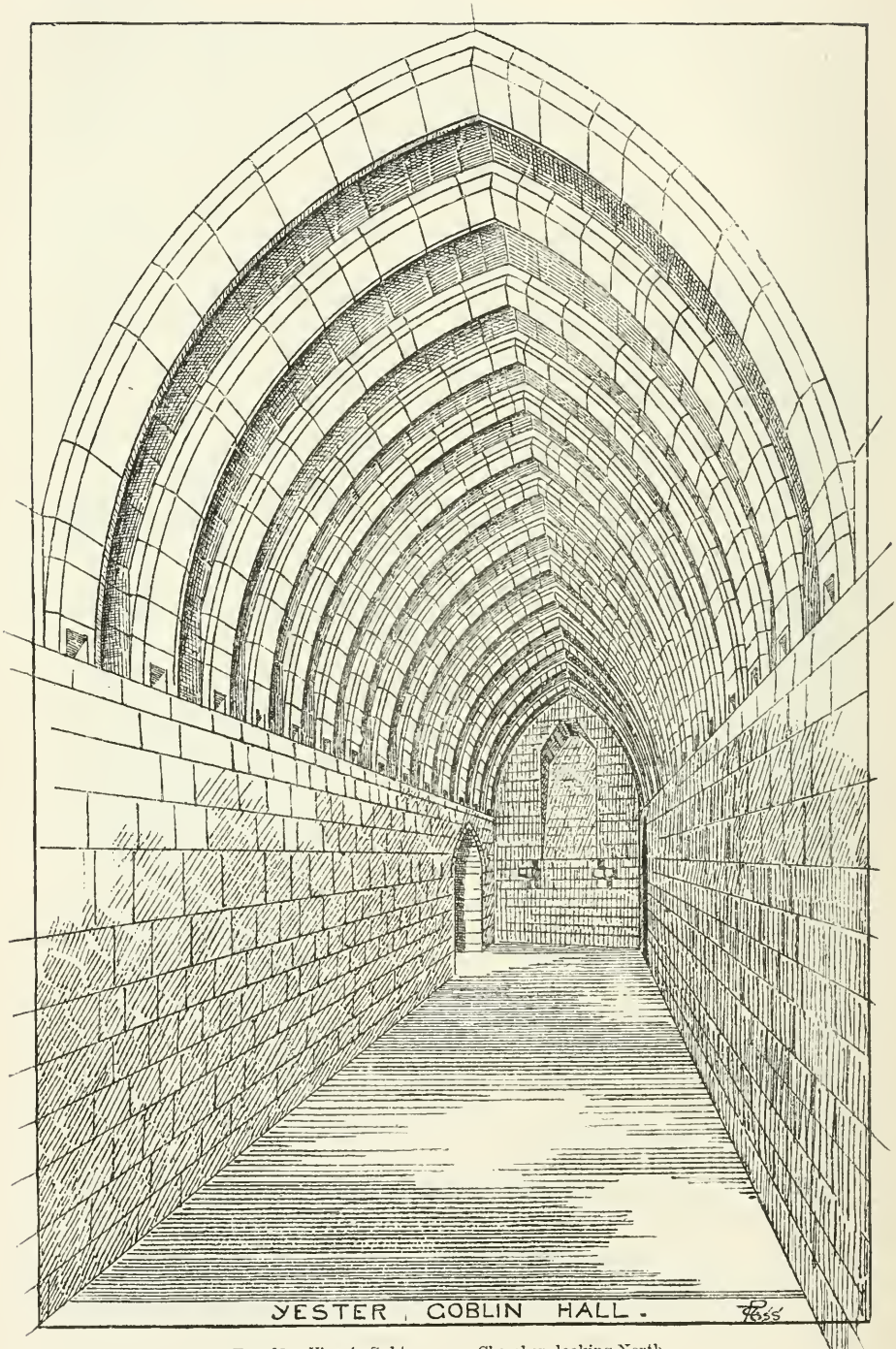


Fig. 95.—View in Subterranean Chamber, looking North.

rock, starting at the same point as the above passage. This staircase descends 44 feet, measuring on the slope of the stair, when it reaches a well sunk in the rock, which formerly contained water, although now filled up with stones. It seems to have been intended to cut the passage or staircase further, as it is left unfinished, with a face of rock at the end. Probably it has been meant to continue these unfinished passages as mines round the building, with a view to act as countermines wherever found necessary to resist the sapping operations of besiegers.

In the north wall of the subterranean chamber there is a remarkable aperture with a flue or tunnel leading upwards, the purpose of which is at first sight matter of doubt and conjecture (sections, Fig. 93, and view, Fig. 95). There are deep slots in the wall as if for sliding beams to carry a platform, placed at a level about half-way between the two floors, and the corbels which supported these beams still remain. The position of these corbels and beam-holes, and the slope of the back of the aperture are peculiar, but the simplest mode of explaining them is to suppose that they formed part of a fireplace. The sloping back of the chimney is not unusual, especially when the hearth was covered with a hood. Hoods, being often of wood or plaster, have generally disappeared. In this case the hood would be constructed of wood, the beams carrying it being inserted in the wall holes and supported by the corbels beneath. The hood would be finished with plaster and sloped back to the wall towards the top of the chamber. The sloping back of the flue in the wall would thus correspond with the slope of the hood. The hearth would be on the level of the floor and the smoke would rise perpendicularly along the straight part of the wall till it reached the hood. The use of the side corbels, which is at first unintelligible, is thus explained. They are the brackets frequently introduced at the sides of fireplaces to carry lamps, of which a fine example occurs at Tullyallan. A fireplace of almost identical construction with the one at Hailes occurs at the castle of Villeneuve-les-Avignon, already referred to. The chimney of Dirleton Tower (Fig. 91) is covered with a stone hood, and the back of the fireplace begins to slope at the hearth, but in other instances, as at Dundonald Castle, the slope begins at some distance above the floor, as it does here. Possibly this chamber served several purposes. It has clearly been intended for a military post, where soldiers might assemble, and from which they might sally out by the secret door above described. It might also be used for secretly introducing reinforcements and provisions.

This chamber, with its secret rock-cut passages and stairs, strongly recalls similar constructions in early French castles, such as Arques and Roche Guyon. Underground passages were also not uncommon in the early English castles, as at Windsor, where a passage was tunnelled from the castle down to the edge of the river. At Dover, also, numerous similar passages are cut in the chalk rock round the castle.

HAILES CASTLE, Haddingtonshire.

We have the remains of another of these thirteenth-century castles

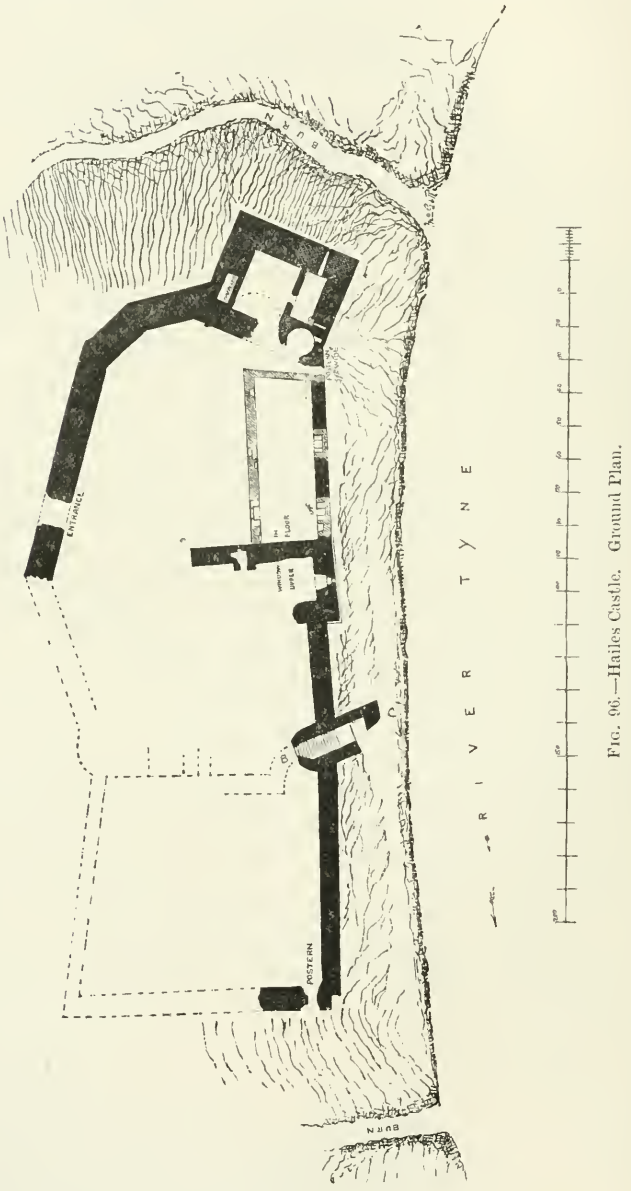


Fig. 96.—Hailes Castle. Ground Plan.

at Hailes, near East Linton. This castle (Fig. 96) is situated on a rocky

promontory on the south bank of the Tyne, formed by the junc-

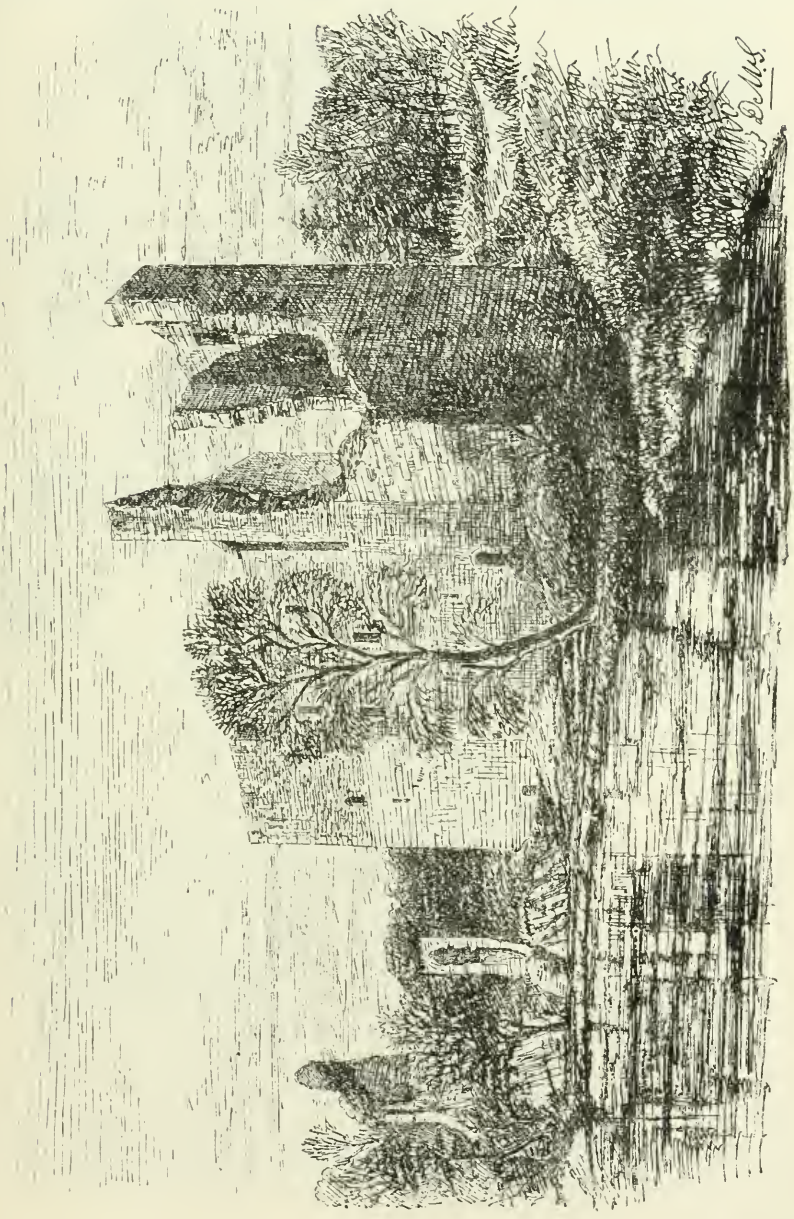


Fig. 97. -Hailes Castle. View from North-West.

tion of another small stream with the river. The castle has been of considerable dimensions, its length being 240 feet by 90 feet wide. In

general form it somewhat resembles Bothwell, but the keep, situated

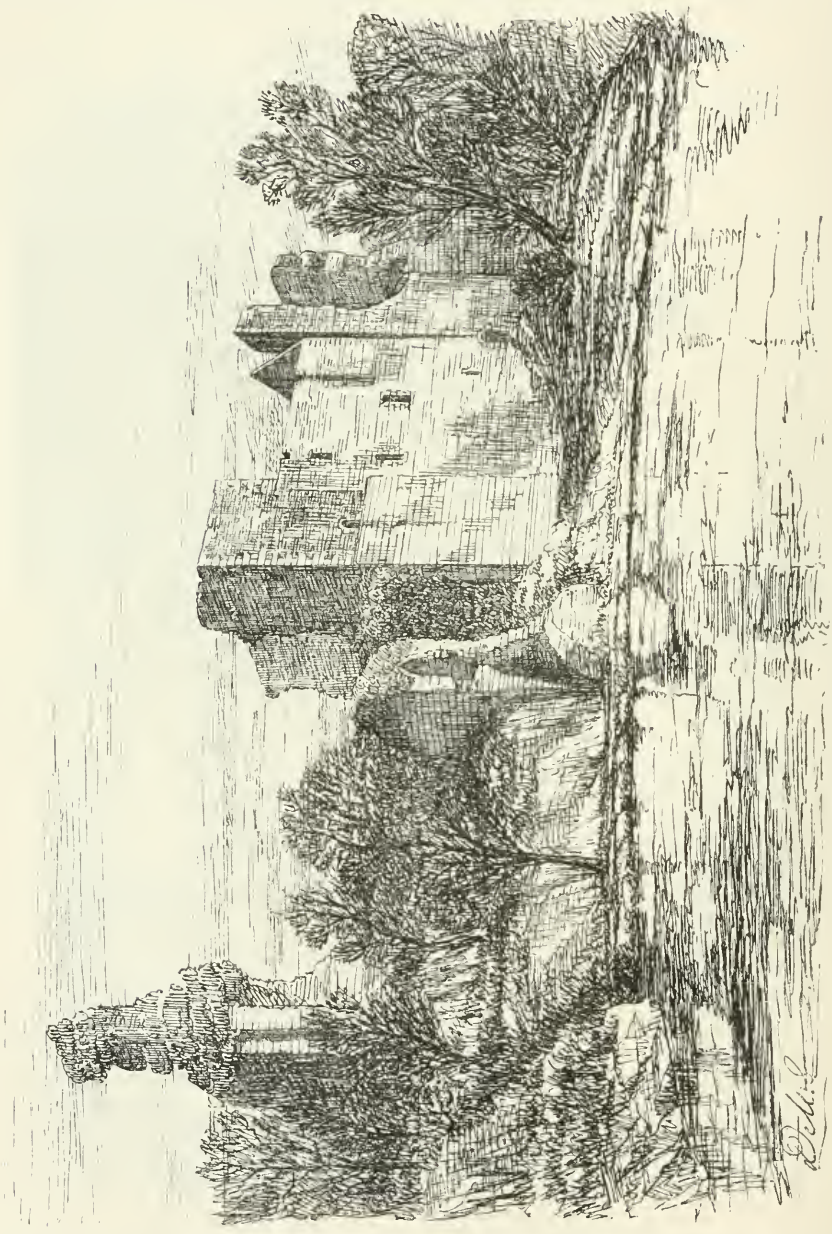


Fig. 98.—Hailes Castle. View from North-East.

at the point of the promontory, is square instead of round (Figs. 97,

98.) The walls of enceinte are 8 feet 6 inches thick, and have been strengthened with towers at intervals. The lower portion of the walls

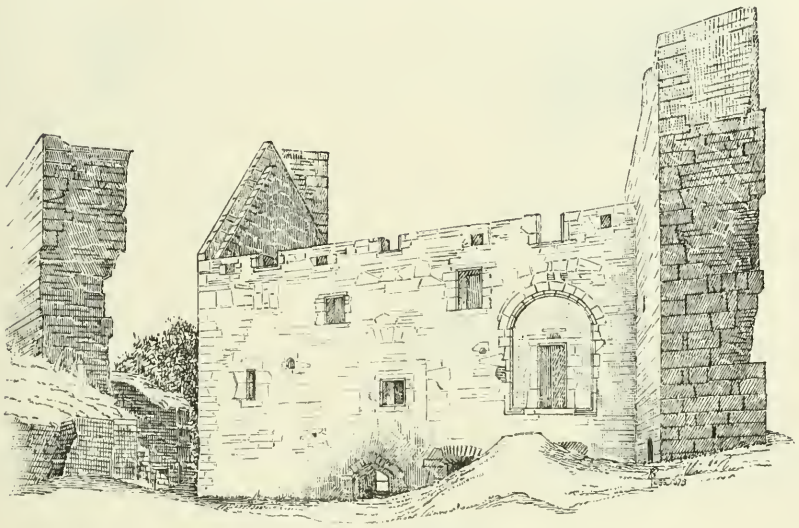


Fig. 99.—Hailes Castle. View in Court from Entrance.

seems to be original all round, but the upper portions have been greatly altered at a later date, the hall seen in the view from the courtyard (Fig. 99) being probably of the sixteenth century. Some of the details shown on the sketches (Figs. 99A, 99B) are evidently parts of the earlier work, and the north postern, adjoining the square donjon, is certainly very ancient.

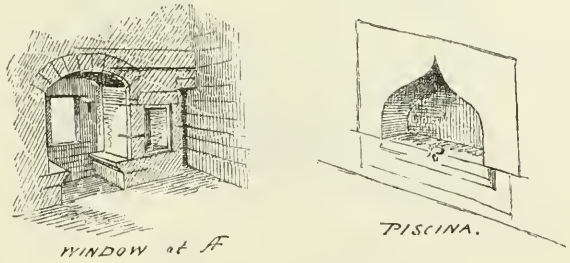


Fig. 99A.

One ancient portion of the building which is specially worthy of note is a postern stair at B on plan, strongly vaulted and ribbed, which leads down to the river. About half-way down there is a landing (section, Fig. 99B) which has been protected by a drawbridge, the outer edge of which rested on a tall built pier, having a deep pit between the pier and the stair-landing. The remainder of the stair was probably of wood, and moveable. Hailes

castle belonged from a very early period to the Hepburns, and the more

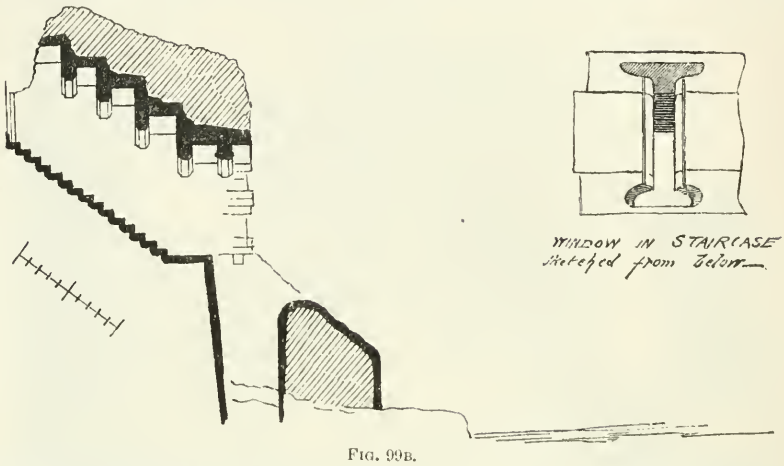


Fig. 99B.

modern parts belong to the time of the famous James Hepburn, Earl of Bothwell, Queen Mary's husband.

Fig. 100.—Old Hailes Castle.

CAERLAVEROCK CASTLE, Dumfriesshire.

Caerlaverock Castle is situated on the shore of the Solway at the mouth of the river Nith, and about 7 miles distant from Dumfries. The castle is in ruins, but is well preserved and taken care of by its noble owner, Lord Herries. The building, which is triangular on plan (Fig. 101), measures about 171 feet along its southern side or base, and 152 feet along its eastern and western sides respectively, and is surrounded by a deep moat full of water measuring about 70 feet wide. Surrounding this, and separating the castle from a marsh (which probably extended originally to the Solway), on all sides, except the north, there is a great mound of earth about 70 feet in width, with a sluice into the marsh near the south-west corner. All along the northern side is firm ground, a large portion of which has been enclosed to form a courtyard beyond the moat. Of the enclosing wall only the arched gateway remains, about 300 yards north from the moat. The entrance gateway of the castle towards the north was protected by the moat, which was crossed by a drawbridge, and beyond this with a ditch which united the marsh on the east and west sides, and was doubtless crossed by another bridge.

Fig. 101.—Caerlaverock Castle. Plan of Site.

The castle in its present form (Fig. 102) is the work of six distinct periods. To the first period belong the outside triangular walls of enceinte. The west wall as it now stands is almost all the work of this period, the east wall likewise, in large portions, and also what remains of the south wall. The castle thus seems originally to have consisted of high walls enclosing a courtyard, with temporary or slight buildings inside, similar to the early castles above described, such as Kinclaven, which is square on plan, Rothesay, which is round on plan, and Dunstaffnage, which is of irregular plan, while Caerlaverock is triangular on plan. How the points of the three angles terminated we do not know, but probably they were provided with round towers similar to those now existing.

In the roll of Caerlaverock, recounting the siege of the castle by Edward I. in 1300, written by Walter of Exeter, who accompanied Edward's army, the castle is described as being in figure like a shield of three sides, with a tower on each angle, one of these a jumellated or

double one, so high, so long, and so spacious, that under it was the gate, with a drawbridge, well made and strong, with a sufficiency of other defences.

It has generally been asserted that the castle besieged by Edward was situated a few hundred yards to the south of the present ruin. It may, however, be said with almost absolute certainty that the outer walls of the castle just described are not later than the thirteenth century. That there was a castle a little further in on the marsh to the south is obvious, but it was evidently mainly an earthwork.

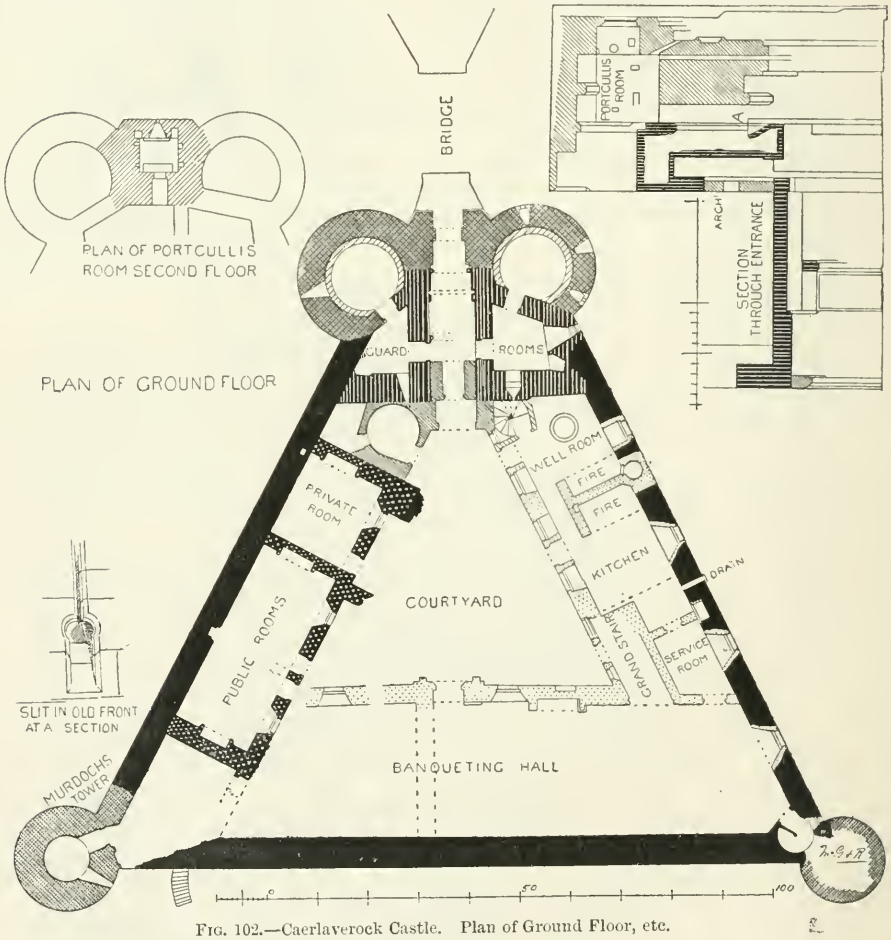


Fig. 102.—Caerlaverock Castle. Plan of Ground Floor, etc.

The siege, which was a formidable affair, with powerful engines hurling huge stones day and night against the castle, terminated by the

capitulation of the garrison, which was found to consist of only sixty men. The towers were probably then demolished, as in the case of Dirleton Castle, also besieged by Edward, where the stump of one of the demolished round towers is incorporated with the walls of the existing castle, which was erected about 100 years later.

The buildings of the second period are immediately behind the round towers, at the entrance gateway, and comprised some 10 or 12 feet of the outer walls where the latter join the towers. This part of the walls is of a different style of workmanship and materials from the older part, but it is probably a rebuilding or repair of the original design. The northern point of this portion of the building formed the original entrance, and part of the old front is still standing at about 11 feet in from the present doorway. At this place an opening is seen in the roof (section, Fig. 102), in length the full breadth of the passage by 2 feet wide, leading up to the room, afterwards added, from which the portcullis and drawbridge were worked. In the face of the wall forming the south side of this opening there still exists a narrow loophole, some 8 or 9 feet in length by about 2 inches in width, widened at the base, so that it exactly resembles a spade (sketch, Fig. 102). The base is sharply splayed so as to give an almost perpendicular aim. The whole will be recognised at once as the kind of slit so commonly seen in the outer walls of Edwardian castles. In its present position, with a wall 2 feet in front of it, such a contrivance would be useless. This conclusively shows, even in the absence of the other evidence, referred to further on, that the present entrance doorway, with portcullis-room above, have been added in front of the old entrance at a later date, and that the inner wall with the Edwardian loop formed the exterior face of the castle. If therefore the buildings of the second period are Edwardian, the buildings of the first period may well have been those against which Edward laid siege. The original entrance doorway was thus deeply recessed between the double towers referred to by Walter of Exeter, as was usual at that time. The round towers were, as we shall see, rebuilt at a later period, when they were probably carried up on the old foundations, and the new gateway, etc., added in front of the old one. In the room immediately behind the above loophole there is a round arch 6 feet 3 inches wide, now built up (Fig. 105). This evidently led into a wall recess out of which the slit opened, as at Dunstaffnage and other early examples. This recess formed the room from which the original portcullis was worked; the groove for the portcullis still remains in the masonry.

The third period of building operations comprises the front, with its twin towers, the two southern angle towers, and probably a contraction of the passage at the inner end of the entrance passage. The imperfect junction in the arching of the passage where the work of this period joins that of the second period is quite obvious. The different style of

the masonry and the tint of the stones in the round towers, is also

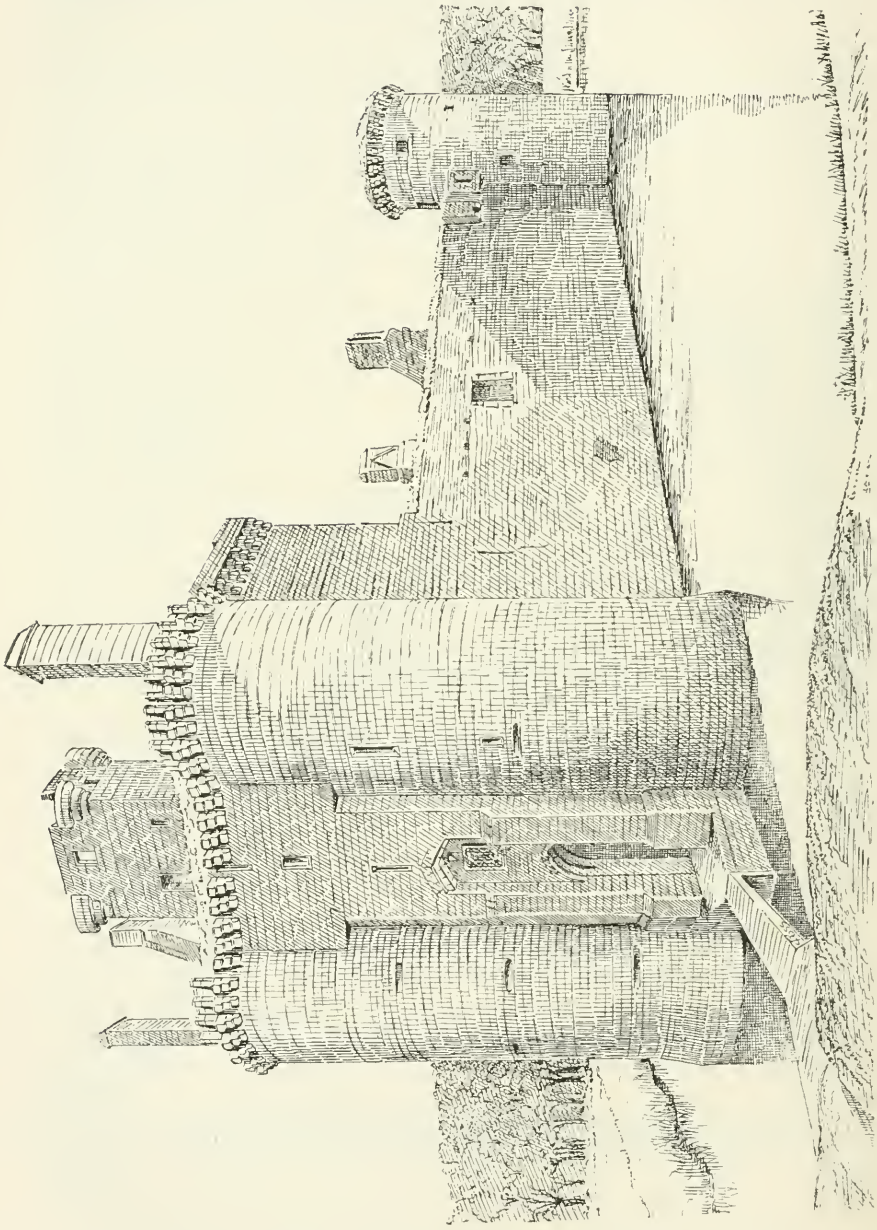


Fig. 103.—Caerlaverock. View of Entrance to Castle.

quite distinct from that of the outside walls of the first period. This is particularly clear at the south-west corner, where, at about 6 feet north-

wards from Murdoch's Tower, there is a perpendicular joint from top to bottom of the wall, showing the junction of the old and new work. The front towers (Fig. 103) measure about 26 feet in outside diameter. Being provided with gun-holes which are clearly original and not inserted, these towers cannot be earlier than the middle of the fifteenth century. In both towers the ground floor was vaulted, but the vaults are now ruinous. They rise from the ground as bee-hive vaults, and seem to have been insertions, as the wall behind, from which they have fallen away, has a finished face on the inside. The towers contain two stories above the vaults, the western one being domed and ribbed at the top.

The portcullis-room between the towers (plan and section, Fig. 102) is at a sufficient height above the ground to admit of the portcullis being drawn up without the necessity of its coming into the room, which is thus left free for the purpose of working the drawbridge from it. The numerous grooves in the walls for the windlasses and beams connected with the hoisting apparatus are still visible. This room is probably a reconstruction in stone of what in the original castle may have been a wooden hoarding, which contained the apparatus for hoisting the drawbridge, and also served as a defence over the gateway.

The buildings of the fourth period of operations comprise the range against the west wall, which is two stories high, with three rooms on each floor. As will be seen on the plans, the southern rooms do not now exist. The appearance of this range of buildings, with their fine mullioned and transomed windows, and with Murdoch's Tower in the background, is shown on Fig. 104.

At this period the west curtain wall was heightened by 6 or 8 feet in inferior masonry, of stones, small as compared with those of the wall below, and at the same time a window, the only opening in this wall, was slapped out in the so-called library (Fig. 105). The date of these buildings was probably the first half of the sixteenth century. This portion of the castle shows very clearly how the ancient wall of enceinte was altered and utilised in connection with the extended buildings which were placed against it at a later date.

The fifth period of the works comprises the large circular staircase on the west side and the lofty archway adjoining, in continuation of the entrance passage (Fig. 106). The work of this period has blocked up a finely moulded doorway with an old Gothic lintel of the previous period, leading from the south into the circular staircase on the first floor. (See plan, Fig. 105.)

The sixth and last period of the history of Caerlaverock comprehends the splendid range of buildings forming the east and south sides of the courtyard built by Robert, Lord Maxwell, probably about the time he was created first Earl of Nithsdale, in 1620. These buildings are in the Renaissance style, which was then coming greatly into use in Scotland,

and superseding the native style of architecture. Along the east side the buildings remain entire for a considerable length, three stories

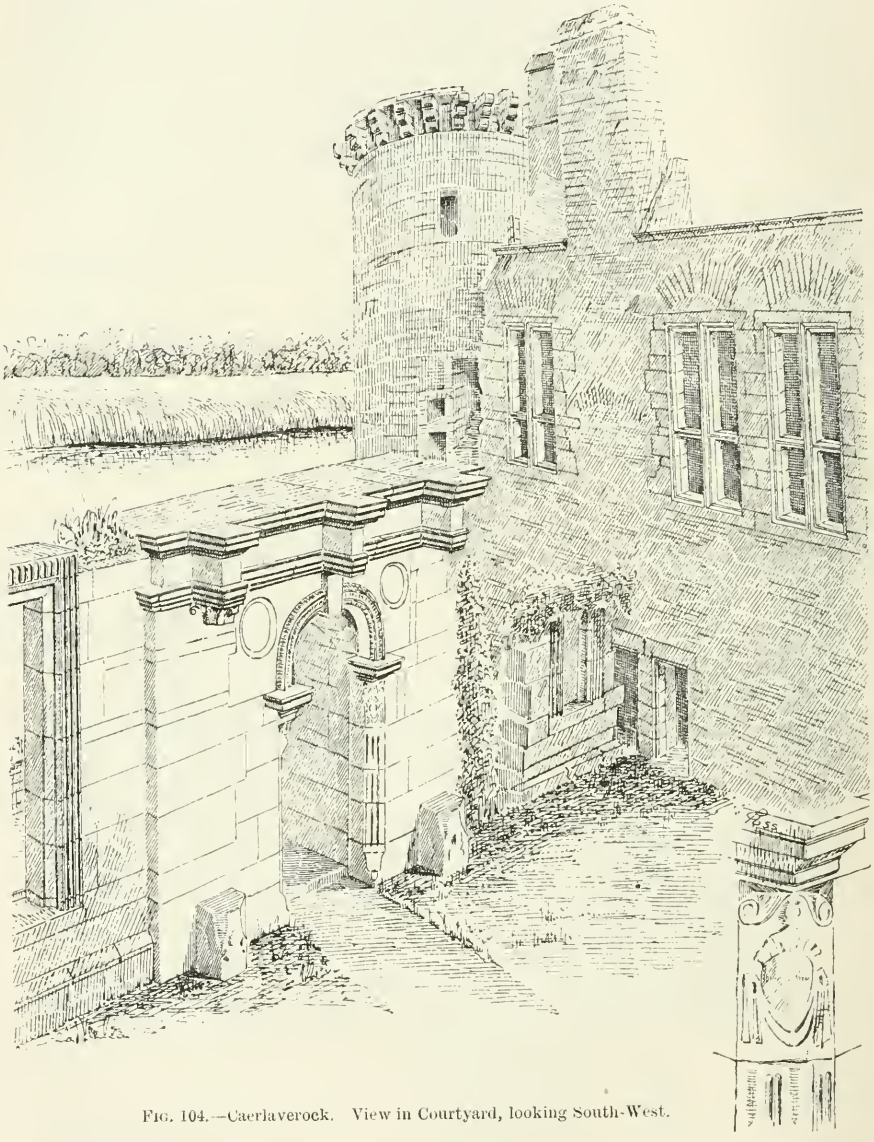


Fig. 104.—Caerlaverock. View in Courtyard, looking South-West.

in height, with highly ornamental windows (Fig. 106), having thin rounded attached shafts with bracketed bases and Ionic caps, cornices, and pediments, triangular and curved, all filled with sculpture and heraldic carving. The sculpture represents classic legends, such as

Prometheus on the rock with the vultures. Every window tells its own story, which was doubtless suggested by the Earl himself, who is known by the sobriquet of the Philosopher. Among the heraldic emblems are the Maxwell saltier and double-headed eagle, with the Nithsdale crest—a stag with a holly bush, and the initials of the Earl and his wife, Elizabeth Beaumont. The panel over the outer entrance gateway contains the Nithsdale, Maxwell, and Royal Arms, and is evidently an insertion.

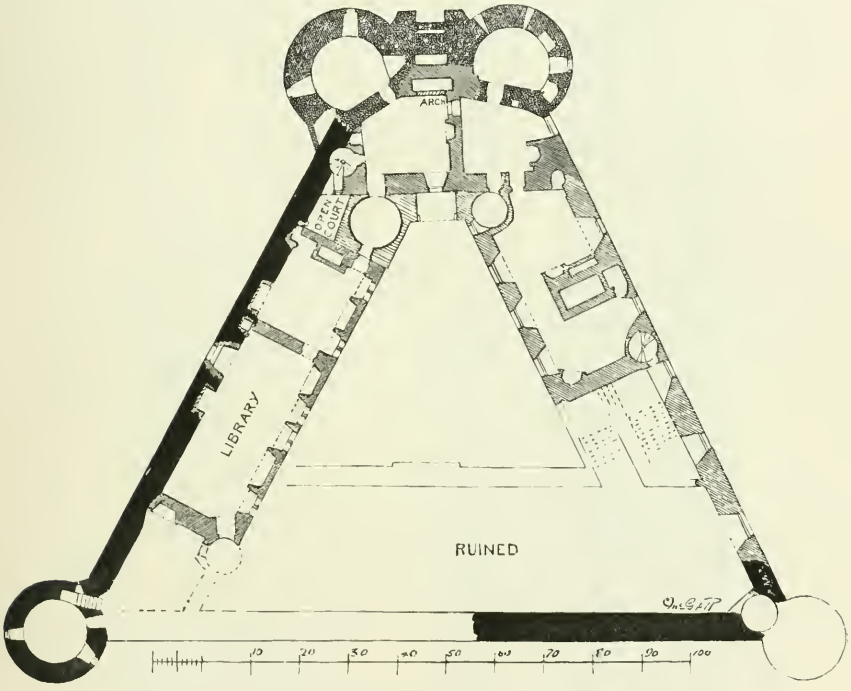


Fig. 105.—Caerlaverock Castle. Plan of First Floor.

The grouping and design of the windows and doorways alternating along the ground floor is very beautiful, and with the splendid doorway leading into the banqueting-hall (Fig. 104), right opposite the entrance-passage, entitles this to rank as one of the finest and richest specimens of early Renaissance in Scotland. Unfortunately, of the banqueting-hall only the basement floor now exists.

Fig. 107 shows one of the fireplaces in the eastern wing, the others being of a corresponding character.

These seventeenth-century buildings are all lighted from the outside as well as from the courtyard, the curtain wall on the east side, which is entire to the top, having been slapped and partly rebuilt. The south

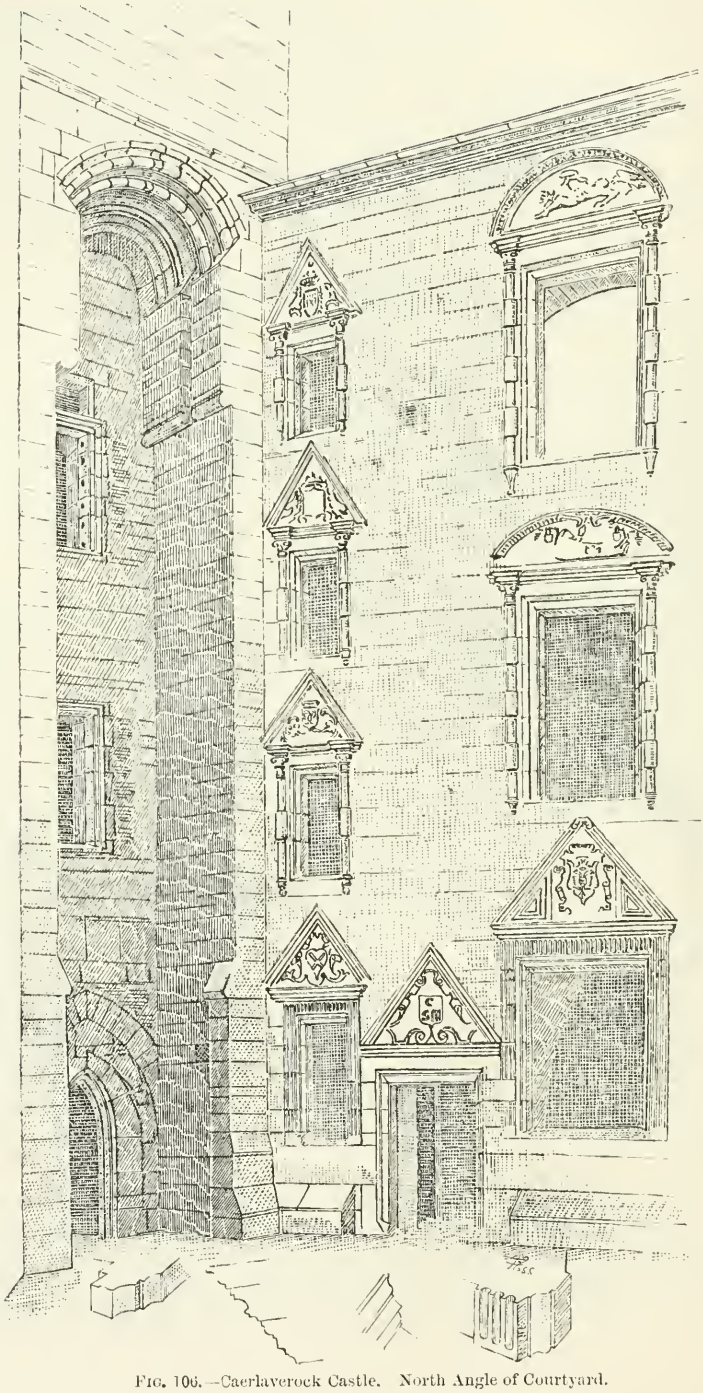


FIG. 106.—Caerlaverock Castle. North Angle of Courtyard.

curtain only exists to the height of two stories at the east end, and at its west end to the height of about 3 feet.

The buildings on the east side are vaulted on the ground floor, and contain the kitchen and well-room adjoining, also used as a secondary kitchen, having an oven. A service-room adjoining the banqueting-hall has its roof vaulted with a raking or sloping arch, so as to support the steps of the grand staircase. The latter is entirely ruined, but it has been on a scale of considerable magnificence. A small service-stair leads from the well-room to the private dining-room and other apartments above.

The chapel is said to have been situated over the banqueting-hall, but nothing remains to indicate this. The round tower adjoining the banqueting-hall, and belonging to an early period of the castle, is quite ruinous. It had a wheel stair giving access to its upper floors, and to the rampart walk. We have mentioned this tower as belonging to the third period, more because it seems naturally to belong to the same period as the corresponding tower (Murdoch's) at the opposite end than from any indications in itself.

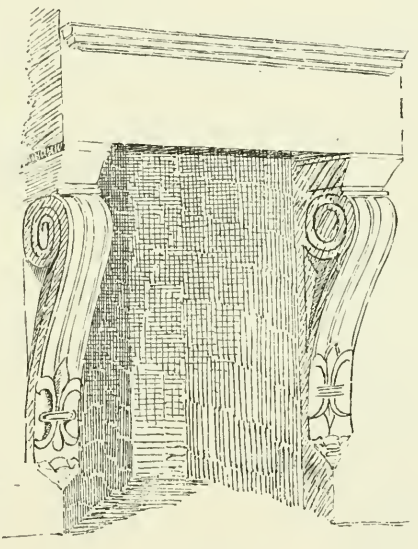


Fig. 107.

Murdoch's Tower, about 21 feet in external diameter, contains three floors above the ground floor. The latter enters directly from the courtyard level, the first floor by a door up a few feet, and the upper floors by a straight stair leading from the rampart walk.

We have already referred to the tradition of an earlier castle of Caerlaverock, triangular in plan, situated some 300 yards southwards from the present building, which is supposed to have remained intact till 1357, when it was taken down and rebuilt in the same shape in its new position. There can be no doubt of the existence of this earlier castle, but the story otherwise is unsupported, and extremely improbable, considering that the present curtain walls, in part at least, are evidently not later than the thirteenth century. The position of Caerlaverock, either the old or new site, is a strong one, on the edge of what was a pathless morass. The earlier castle, which was an earthwork, was in all likelihood the "strength" of primitive settlers, and seems to have been abandoned for the more convenient and equally strong situation of the existing ruins at the time

when castle-building in stone began in Scotland. Viewed in the light of its various architectural styles, and in the light of its own history, it is clear that the original portions of this castle could not have been erected later than about the middle of the fourteenth century, the date at which Caerlaverock Castle is said to have changed its site.

TARBERT CASTLE, Argyllshire.

This castle is of unusual interest from being intimately associated with King Robert the Bruce. It is situated on a small creek called Loch Tarbert, on the west side of Loch Fyne, and stands on the summit of an eminence about 60 feet above the sea, and at a distance from the shore of about 60 yards. It was one of the royal fortresses which Edward I. caused to be handed over to Baliol, after placing him on the throne in 1292. In 1325 Bruce had the castle inspected and repaired, with the intention of using it for the purpose of overawing the Highlanders, then being brought by him under subjection, and a glance at the map will show that the situation of Tarbert, on its isthmus, is one of the best strategical positions in the country. The object of the castle from its first erection must have been to serve as an entrenched camp or stronghold for a large garrison on the edge of a country which might any day rise up in rebellion, and this explains its plan. The castle with which Bruce's name is associated seems hitherto not to have been recognised, but has always been confounded with a late keep adjoining it to the east, situated in the outer courtyard. It is shown by hatched lines on the plan, and will be hereafter described.

We have now no means of exactly determining to what extent the castle existed before Bruce's additions and repairs were made, but judging by analogy we may infer that the square enclosure which constitutes the castle proper was what he found existing before he commenced his operations. This castle or enclosure has a strong resemblance to Kinclaven Castle, Perthshire, a pre-Brucian castle of almost the same size and plan. If this surmise is correct we may conclude that Bruce erected the lower court with its drum towers, and so enlarged the castle as to make it better available for his purpose.

Tarbert Castle (Fig. 108) consisted of walls enclosing a square measuring about 120 feet each way, now generally reduced to little more than grass mounds, with pieces of masonry seen here and there, except along the north-east curtain, where considerable portions of the old wall can still be seen on the lower ground outside. These walls were not less than 8 feet thick, but of their height no estimate can now be formed. The north-west angle of the square was slightly canted to suit the ground. Inside this enclosure was another square formed by walls of the same thickness as those just described, with a space between of from 18 feet

to 20 feet, and in this space the castle buildings have apparently stood. There are grass-covered traces of foundations against the north-east and south-east curtains, not however extending quite across the 18-feet space. At the inside angle of the north corner there has been a building of some kind about 20 feet square, with the walls seemingly brought up from a depth below the natural surface. This may have contained a well in the under floor, or a tank or reservoir for water, such as are sometimes found in the earlier hill forts.

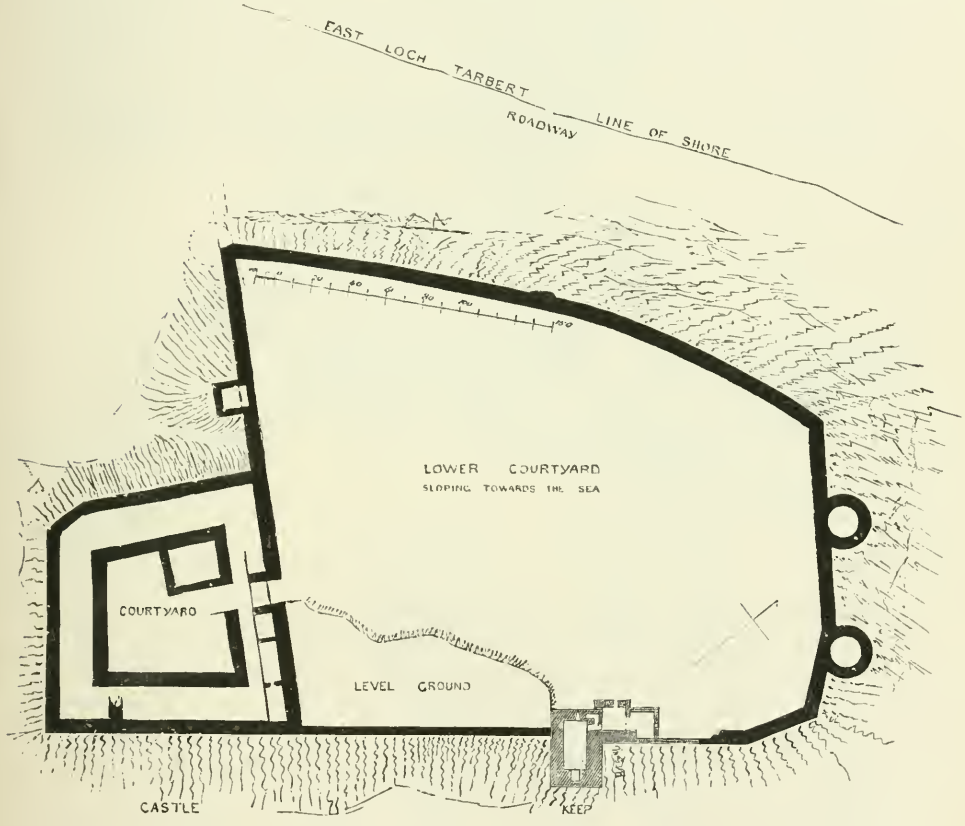


Fig. 108.—Tarbert Castle. Plan.

The centre of the castle which in ordinary cases would be called the courtyard, is here the natural sloping face of the hill-side, with several large rugged rocks projecting in confused masses through the ground. No attempt has been made to alter its surface by artificial means, but the space within the outer and inner walls (the 18-feet space) has been raised so as to be about level from north-east to south-west, with a fall to the north-west corner. The making-up, as seen on the north-east side, has

been on an average about 6 feet, but considerably more along the north-west side, owing to the fall of the hill being in this direction.

Adjoining the castle to the north-east there is a second and larger enclosure, already referred to as being possibly the work of Bruce. This forms the lower court, which, like the court of the castle just described, is the rugged, rocky, unaltered surface of the hill-side. This court measures about 300 feet by 240 feet. Two of its sides are formed by a continuation of two sides of the castle proper. At the east corner the wall bends inwards to meet the north-east wall, which is strengthened by two drum towers about 28 feet in diameter, and 40 feet apart. These towers defend the approach to the castle by the sea, and probably the entrance gateway was situated at the bend of the wall near this point. Fig. 109 gives a general view of the south-east and north-east fronts. The north-west enceinte is a continuous crescent-shaped wall, shown on the Ordnance

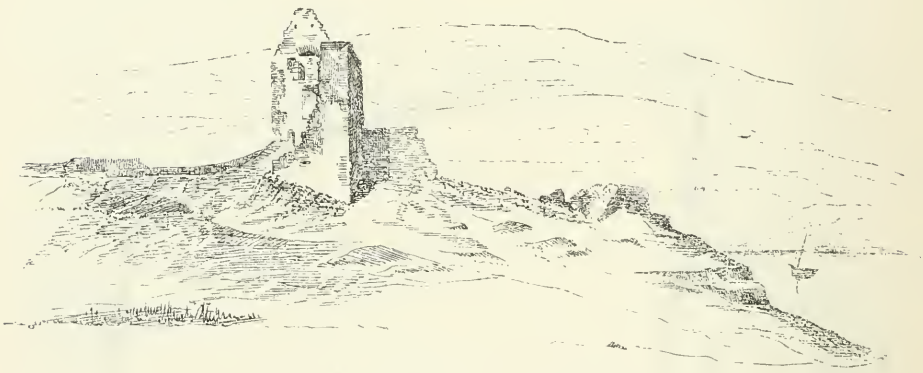


Fig. 109.—Tarbert Castle from the South-East.

Plan as having had a drum-tower at its junction with the south-west wall (shown by dotted lines, Fig. 108), but of this there is now no trace. On the latter wall, about 30 feet distant from the castle, are the remains of a square mural tower measuring about 20 feet each way. This wall seems to have been continued down to the sea, but extensive quarrying operations and a roadway with houses along the shore have obliterated its lower end. On the south-eastern wall stands the later keep and buildings, to be afterwards described. Of the north-east, south-west, and south-east walls just described, there are considerable remains, and at their most ruinous parts they can be distinctly traced along their whole respective lengths. The north-east wall with its drum towers on the outside is about 8 feet or 10 feet high. Of the crescent-shaped north-west wall nothing remains but its track along the brow of the hill.

At the southern corner of this courtyard, between the keep and the castle, is a triangular piece of ground about 135 feet long by 45 feet wide.

It occupies the highest part of the courtyard, and is the only level ground

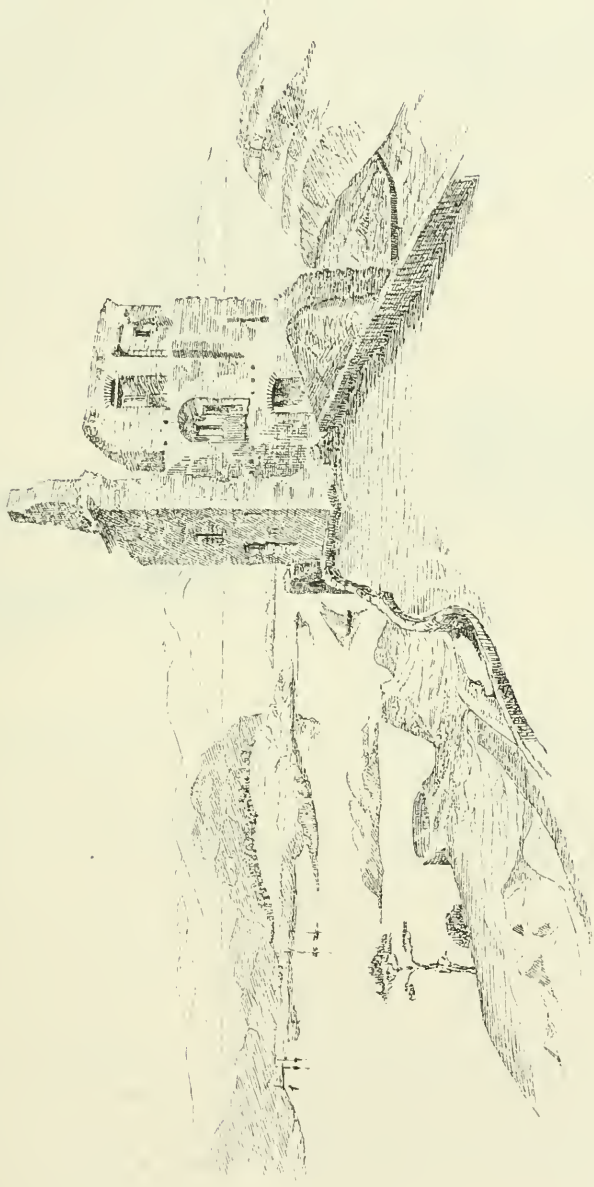


Fig. 110.—Tarbert Castle. Keep from North-West.

within the walls, having been made so artificially. It is about the same level as the first floor of the keep. The great courtyard above described

has evidently been the basse-cour of the castle. Bruce found it necessary to add this to the original structure in order to make the castle conform to the plan then universally adopted. At the same time he would appear (from the documentary evidence to be hereafter referred to) to have built a hall and a dwelling-house within the walls of the ancient fortress, thus converting the whole into a genuine castle of the thirteenth-century type.

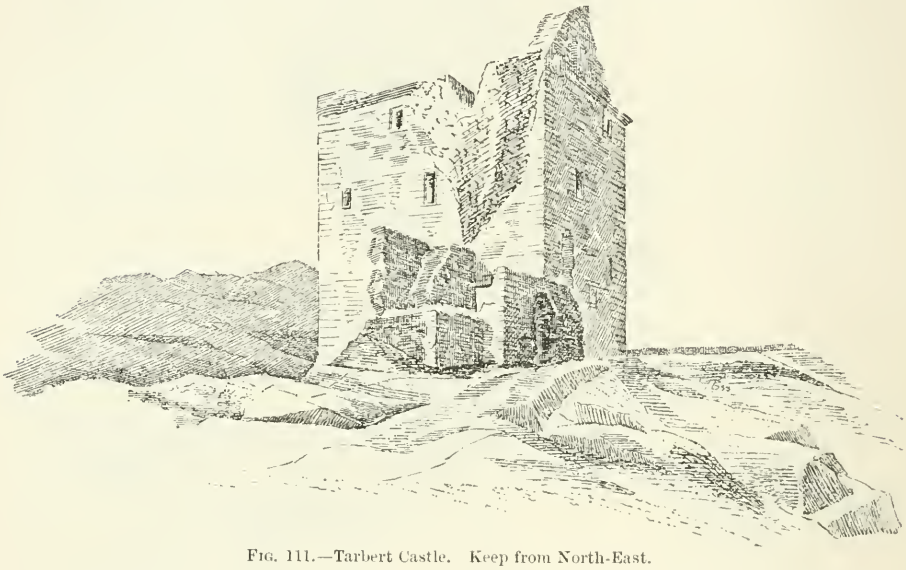


Fig. 111.—Tarbert Castle. Keep from North-East.

The keep already referred to is of late fifteenth-century or early sixteenth-century work, and stands near the centre of the south-east wall of the lower courtyard. It measures 41 feet by 26 feet 3 inches over, and is four stories in height. Up till nearly the middle of this century its four walls were entire, with stairs leading to the various floors, continued round the north, west, and south walls, in the thickness of the walls (as at Hallbar, Coxton, etc.), but about that time nearly all the south-west and south-east walls fell. The keep (Figs. 109, 110, 111) is now the only portion of Tarbert Castle which bulks largely in the landscape, and it is doubtless owing to this that it has had conferred on it the honour of being regarded as the castle built by the great Bruce. The entrance (Fig. 108) at the north corner leads directly into the vaulted ground-floor, which is the only part now entire. It measures inside 26 feet by 12 feet 6 inches, and was, when clear of ruins, about 9 feet high.

At the south-east end is an arched recess in the wall, 4 feet 9 inches wide by 6 feet deep, having a broad splayed shot-hole for guns. This and a narrow splayed loop in the opposite wall supply all the light on this floor. From the passage leading to the vault, the stair already mentioned

leads off to the upper floors. There has been one apartment on each of these floors (Fig. 112) with wall chambers, and on the top floor only is there a fireplace, but doubtless the two floors beneath contained fireplaces in the now fallen walls.

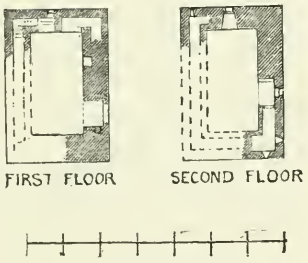


Fig. 112.—Upper Floors of Keep.

There are not many details about the keep, but what there are, as shown by sketches, Figs. 113 and 113A, all point to its erection at a late period. These are the gun-holes, several beaded windows, and beaded fireplace, the parapet with its continuous corbelling, consisting of small members, and the general style of masonry.

Additions have been made to the keep on the north-east side, consisting of two apartments, probably two stories in height, and entering from the courtyard, with shot-holes on each side of the door. One of these apartments was probably the kitchen. There is a stone sink and drain in the north-east angle.

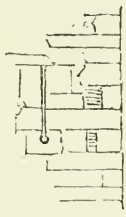


Fig. 113.—Loop in West Gable of Keep.

The accounts of the building, or rebuilding and extension of the castle, or "Castrum," in the year 1326, are preserved, and are printed in vol. i. of the Exchequer Rolls. It would appear from these that the King took a personal interest in the building, as is shown by his paying Robert the mason £5, 6s. 8d., in addition to his contract of £282, 15s., for having in the King's absence made the walls of an extra thickness. These and other figures from the Rolls denote Scots money. We also find the King's friends, William of Lamberton,

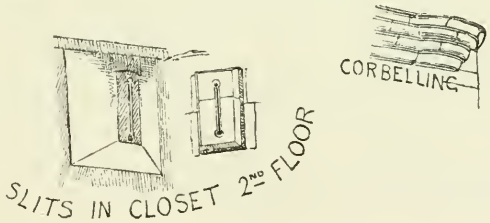


Fig. 113A.—Details of Keep.

Bishop of St. Andrews, and James Lord of Douglas, visiting the castle, and payments made for decorating their apartments and the hall with branches of birch, and for providing litter. We have the payments made to John the carpenter, Donald the blocker, Neill the plumber, and Neil the smith; also the payments for burning and conveying lime by sea and land to Tarbert.

The Rolls likewise contain payments for erecting a house in the castle,

for the plastering and roofing of the castle, fitting up its hall and wine-cellar, and making a moat about it, for erecting a mill, kiln, bakehouse, and brewhouse, for building a "pele" at West Tarbert, and making a road across the isthmus to the said pele, which is probably the road used at the present day. There was a chaplain appointed, with a salary of £4.

In the year after the death of the King, which happened at mid-summer 1329, payments were made for completing the castle and keeping up the park. In all probability the park referred to is the lower courtyard, which must have been a very necessary appendage in connection with the horses, cattle, poultry, and sheep, for which payments appear as well as for the servants in charge.

The importance of Tarbert as a military stronghold continued to be recognised long after the time of Bruce, down indeed till the troubles of last century. At the end of the fifteenth century, James IV. found himself, like the Bruce before him, compelled to conduct an expedition against the turbulent islanders, and we have frequent references to Tarbert in the accounts of this period edited by Mr. Dickson. There is an account of "The expens maid uppone the vittuling of the Tarbert and the King's schippis, the tyme the King past in the Ilis, in the year of God, 1494." And at the same time couriers are despatched to summon the Lords of the Westland, Southland, and Eastland, to the meeting of the King at the Tarbert, and another courier is sent from Glasgow with writings to his Majesty; but perhaps the most interesting item is of this same year, and as follows: "The Comptare charges him wyth xx li. ressauit frae the Bishop of Dunblane to the biggin of Tarbert," and for the "said caus" the same sum from the Abbot of Newbotell. These sums were, in all probability, for the building of the keep, which, judging from its style of architecture, as already stated, belongs to this period.

In the same year, an eventful one for the place, there was delivered to my Lord Chamberlain at the Tarbert, iii^{xx}vj li. xiij s. iiij d. (£66, 13s. 4d. Scots). For what purpose this money was used we do not learn, but it is satisfactory to find documentary evidence for building operations corroborating the equally valuable evidence of architectural style. The King was back again at Tarbert three years later, when we may readily suppose the keep to have been finished.

THE CASTELLATED AND DOMESTIC ARCHITECTURE OF SCOTLAND.

SECOND PERIOD—1300-1400.

With the close of the thirteenth century, the style of castles consisting of great walls of enceinte strengthened with massive towers comes to an end. The invasion of Edward I. in 1296, and the disturbances of the fourteenth century, destroyed the prosperity of the preceding period. There is thus a great gap between the style of the thirteenth-century buildings and those which succeeded them in the course of the fourteenth century, and we have to traverse a very long period ere we meet with castles of the size and elegance of those we have just been considering. The thirteenth-century buildings of Scotland thus form a very distinctly marked period in the architectural history of the country, and constitute the first period of Scotch castellated architecture.

During the fourteenth century the country was in a state of complete exhaustion, consequent on the great struggle for national independence, and was not in a condition to engage in extensive building operations. Besides, the policy of Bruce was opposed to the building of large castles, as these were found liable to be taken by the enemy, and to afford him a secure footing in the country. Bruce's policy was to destroy everything before an army of invasion, and leave it only a barren country to occupy—a policy, the wisdom of which, in the relative position of Scotland and England, was often proved subsequently by the starving out of the invaders.

The castle erected or extended by Bruce at Tarbert was exceptional, being for the specific purpose of keeping the Highlands and Islands in order, and to provide security for the garrison. The castle of Lochmaben, and some others, were also preserved, from their occupying special positions, which it was necessary for strategic purposes to fortify.

For the above reasons we find only few and small remains of castles or domestic buildings erected in the fourteenth century, or at least till near the close of the century. The dwellings of the peasantry were mere huts, which were easily replaced after the storm of an invasion was past. The houses in the towns, also, at this period, and for long after,

seem to have been constructed chiefly of wood, and were frequently destroyed either by accidental fires or by the enemy.

The mansions of the nobility in the country, being constantly liable to be attacked and burnt, were necessarily built of stone; while from the impoverished condition of the barons at this time, they were of the simplest form. All that was required was a stronghold sufficient to accommodate the owner's family and personal retainers, and to protect them from sudden attack. The square towers or Norman keeps which had become familiar to the Scots in their frequent invasions of the northern counties of England, naturally became their model, and all the castles of this period preserved to us are built on this plan. These castles consist of a square or oblong tower, with thick walls built sometimes with ashlar and sometimes with rubble-work, and defended from the parapet at the roof, the angles of which are rounded, or more generally projected on corbels in the form of round open bartizans. The parapets and bartizans have frequently open machicolations, but sometimes merely corbels without openings, and sometimes the parapet is carried up flush with the wall, without projection or string-course. The keeps of this period sometimes depart from the original Norman model to the extent of having a small wing added at one corner, so as to give the building the shape of the letter L. Such keeps are described as being built on the L plan.

The ground floor is always vaulted with a plain tunnel vault, generally semicircular, though occasionally pointed, and was used as a store-room, or as a stable for the protection of cattle, a loft for the domestics sleeping in being generally formed in the vault.

There is frequently no communication from the ground floor to the first floor, except by a hatch in the vault. The principal entrance to the tower is usually on the first or second floor level, and was approached by a movable stair or ladder. The hall occupies the whole of the first floor, and is usually vaulted with a plain semicircular or pointed barrel vault. This is generally divided with a wooden floor into two stories in the height, as is apparent from the rows of corbels which almost invariably run along each side to carry the upper floor. The windows and fireplaces which occur at the level of the upper chamber in the vault also show, where they are introduced, that it was occupied as rooms, and was not merely a gallery, as is sometimes thought. Above this there is a second story containing the private apartments of the lord and his family, and there is also usually an upper chamber, either in the roof or vaulted, so as to carry the roof.

The roof is generally constructed with stone slabs, well dressed and grooved into one another, and resting on the vault beneath. The gutter is also formed with dressed stones, every alternate stone having a drain through the parapet with a projecting gargoyle, either plain or carved in

the form of an animal, like those of the churches. The chimney-stacks are carried up on the inside face of the thick walls, so as to allow a free parapet walk all round for defence. There are sometimes a few, and sometimes a great many, small chambers formed in the thickness of the walls, which were used as bed-places, garde-robes, etc. The access to the upper floors and the roof is nearly always by a newel stair at one corner in the thickness of the wall.

A tower thus constructed almost entirely of stone was well calculated to resist the effects of siege and fire, so common in those times; and even if taken by assault, was not easily so much damaged but that it could readily be restored again.

The accommodation of these towers is very circumscribed, and was soon felt to be so. There could be no privacy where one hall served as living-room and sleeping-room for the retainers and domestics, and where there was not even provision for the separation of the sexes. Accordingly, although the above form of tower was long retained in the smaller peles, we soon find efforts made to improve the accommodation of the larger keeps built at this time. This was done by adding to the square or oblong block a small projection or wing at one corner, which gave at least one additional room on each floor. A larger number was often obtained by making the ceilings lower, and thus introducing more rooms in the height of the wing than in the tower. This addition permitted the lord to have a private room, where he could receive visitors, apart from his retainers, besides supplying one or two separate bedrooms on the upper floors. In course of time, other modifications of the square keep were adopted, so as to provide additional accommodation, but it is remarkable how long and how persistently this form is adhered to. It may always be assumed in examining these old towers that the presence of numerous apartments (particularly when a distinct kitchen can be discovered) indicates that the building, or at least the part of it containing these apartments, is not amongst the early examples.

Although specially characteristic of the fourteenth century, the simple style of keep above described continued to be erected during the fifteenth and subsequent centuries, and so plain and devoid of ornament are almost all these keeps, that it is often difficult to determine their exact age. Another circumstance which adds to this difficulty is that the same model of keep tower is common to all periods from the fourteenth to the seventeenth century. There are, however, sometimes a few mouldings or enrichments, or some slight modifications of the plan, which, together with historical evidence, enable the age of many to be approximately ascertained.

There can scarcely be a doubt that all these keeps had, like their Norman prototypes, a courtyard connected with them, enclosed with a

good wall, although few specimens now remain. This court or barmkin was essential to contain the stables and other offices, and gave considerable additional security by protecting the keep from sudden assault.

In some instances these courtyards were of considerable extent, with walls of enceinte, defended with towers, on the same general idea as the thirteenth-century castles above described, although greatly reduced in dimensions, and wanting in the skilful disposition of the towers and curtains for mutual defence. As the country improved, and manners became more refined, buildings providing enlarged accommodation were extended round the inside of the walls of the courtyard, large windows were opened in them, and finally the walls of enceinte became absorbed in the buildings. These gradually dropped their castellated character, and assumed that of a mansion built round a quadrangle, precisely as happened at an earlier period in France and England, and, as we have observed, was the case at Bothwell. This, however, did not occur generally in Scotland till the sixteenth century. But during the fifteenth century we find several of the larger castles designed from the first upon the plan of buildings surrounding a courtyard, as will in due course be pointed out. Throughout the course of the architectural history of Scotland we find the two types of plan above described continuing to prevail together, viz., first, the simple quadrilateral keep or house, surrounded by a wall enclosing a courtyard ; and, second, the castle, consisting chiefly of a wall of enceinte, with towers and other buildings connected with it, until in course of time both these types developed into the mansion built round a quadrangle : the keep plan, by adding buildings round the wall of the courtyard ; and the castle plan, by omitting the towers and reducing the wall of enceinte and piercing it with openings, so as to form the outer wall of apartments built round the court. But we shall find that the keep plan, pure and simple, was also much adhered to in later times, and formed the model on which many of our mansions (even as late as the seventeenth century) are planned.

Examples of the quadrilateral keep of the fourteenth and fifteenth centuries are very numerous all over the country.

As above mentioned, it is difficult to fix the exact date of many of these keeps, but we shall now describe first some of the simple towers or keeps which seem undoubtedly to belong to the fourteenth century.

LOCHLEVEN CASTLE, Kinross-shire.

One of the simplest and least altered castles of this period is that of Lochleven. The early history of this castle is almost unknown. In 1335 it was defended by Alan de Vipont against John de Strivilin, who acted for Edward Baliol ; and it is most probable that the existing keep and wall enclosing its courtyard are the buildings which then existed. The

castle afterwards passed into the hands of a branch of the Douglases, by whom it was held when Queen Mary was imprisoned in it. It is now the property of Sir Graham Montgomery.

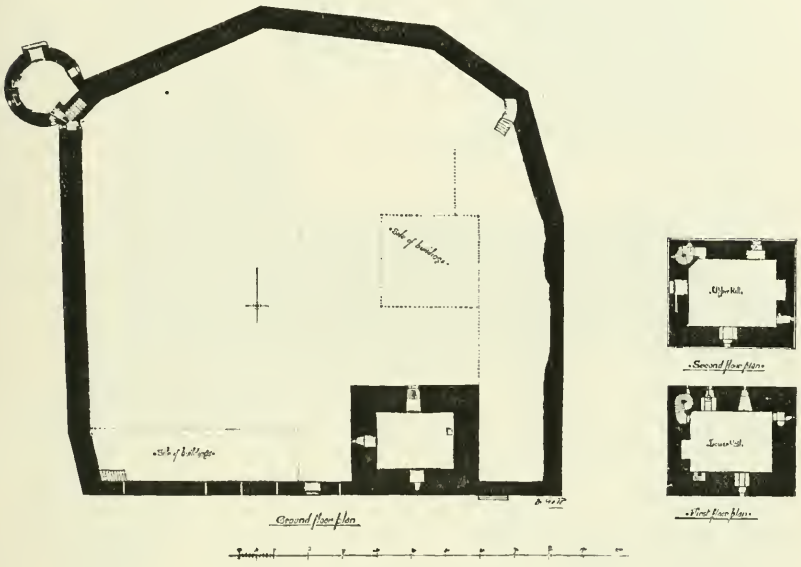


Fig. 114.—Lochleven Castle. Plans.

The keep (Fig. 114) is small, being only 22 feet 6 inches by 16 feet 6 inches internally, with walls 7 to 8 feet thick. The basement floor and first floor are vaulted. The basement, which is several feet below the level of the court, had probably an outer door where the present one is. There is no communication from the basement to the first floor but by a hatch in the vault. The most unusual feature in this keep is the entrance door (Fig. 115), which is on the *second floor* above the basement floor, the only access to the first floor being by descending the stair from the second floor. There is now no access to the upper floors above the second, but it will be observed that the parapet rests on simple corbels, without machicolations, and that there is no angle bartizan or turret at the corner next the interior of the courtyard, where it would not be needed for defence against assailants from the outside of the castle. The view from the exterior of the castle (Fig. 116) shows the three angle bartizans. The wall of the courtyard is for the most part old, probably fourteenth-century work, and has a parapet walk all round. The round tower at the south-east corner of the enceinte is more recent, apparently of the sixteenth century.

There have been much more extensive buildings on two sides of the courtyard, which probably existed when Queen Mary was confined here,

but these are now all demolished. At the west side, part of the enclos-

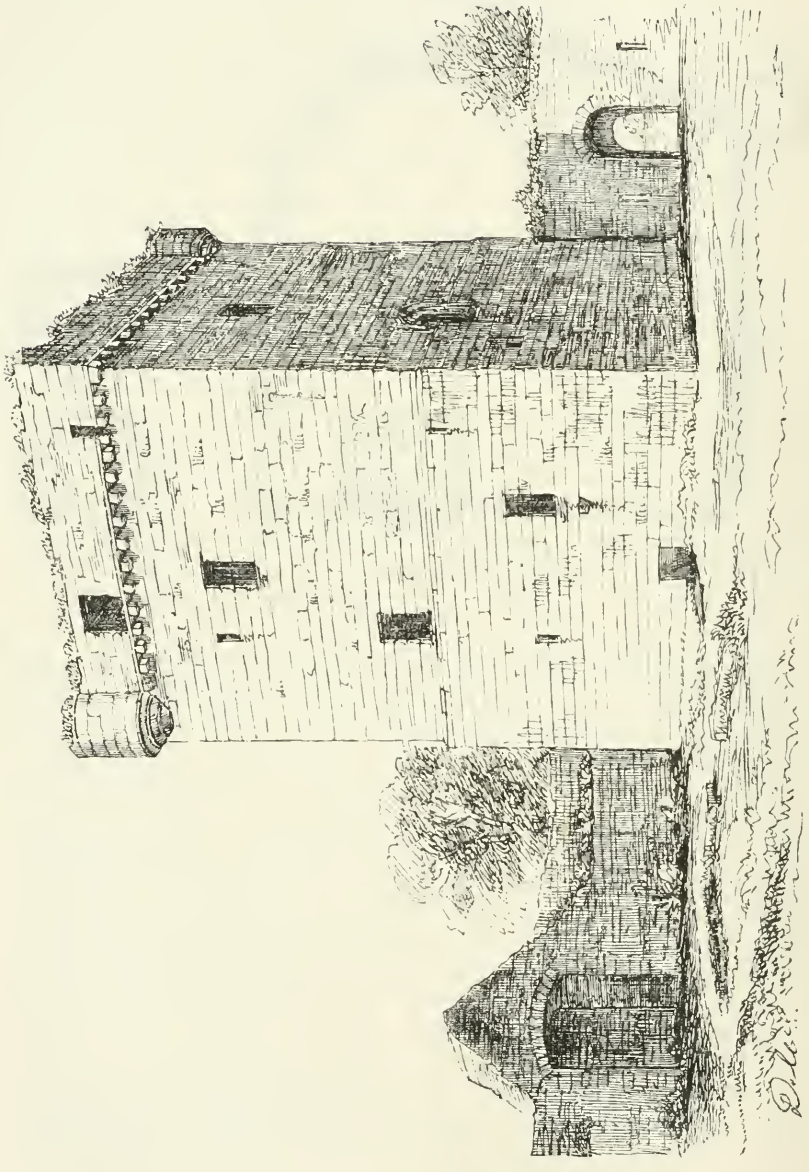


Fig. 115.—Lochleven Castle. Interior of Courtyard.

ing wall has been rebuilt, and a large window inserted in connection with buildings placed against it (Fig. 115), showing how the process of

absorption of the wall of enceinte was carried out. The loopholes in

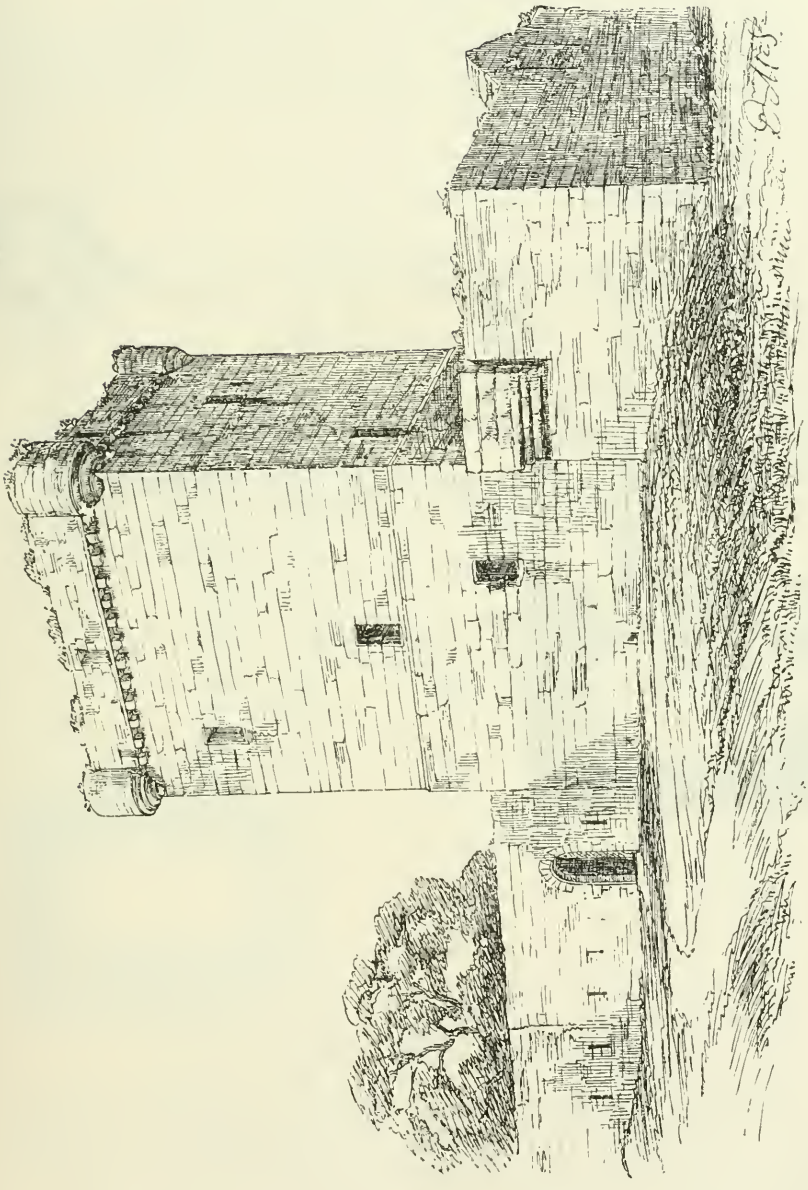


Fig. 116.—Lochleven Castle. View of Exterior.

the north wall are for the defence of that side in which the entrance gate is situated.

DRUM CASTLE, Aberdeenshire.

This ancient and historic castle is pleasantly situated on a rising ground about a mile northwards from the river Dee, and is surrounded with fine old trees. It consists of an ancient keep, to which a mansion was added in 1619.

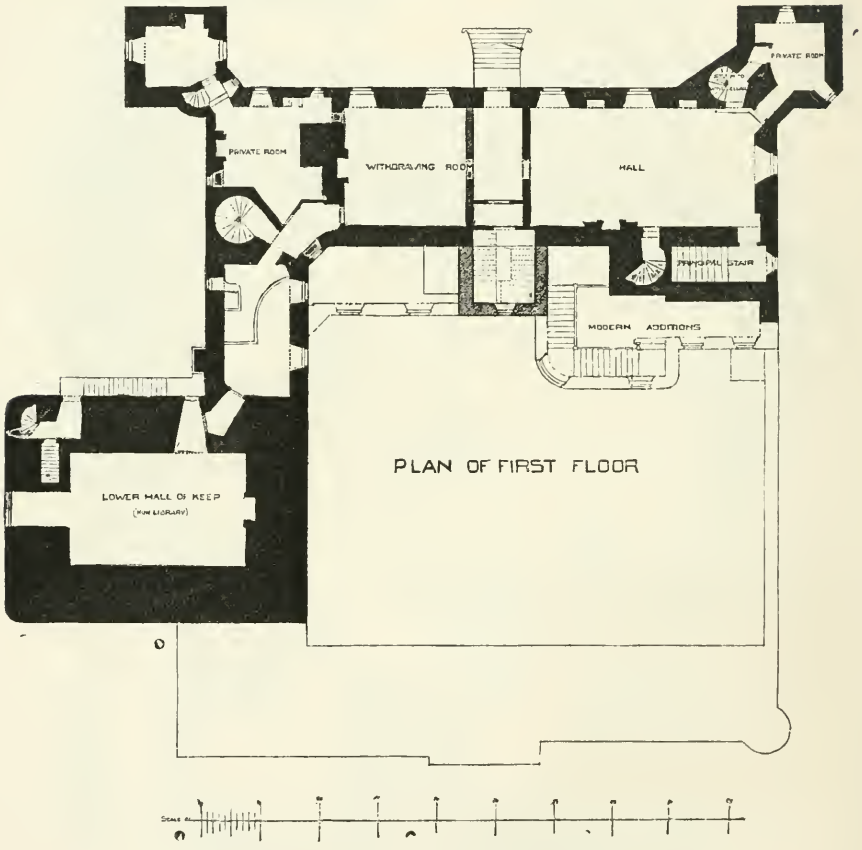


Fig. 117.– Drum Castle. Plan of First Floor.

The estate of Drum has been in the possession of the family of Irvine from the time of King Robert I., by whom it was bestowed on William de Irvine in recognition of his faithful services as the King's secretary and armour-bearer. The original charter conveying the property, dated 1st February 1323, is still in the possession of the family, who have always played an important part both in the affairs of the county and the nation.

The existing keep was probably built about the time of William de Irvine. Drum was previously a royal forest, and one of the hunting-seats of the kings of Scotland. This keep may therefore have been originally a royal residence. It has all the characteristics of the fourteenth-century towers. The plan is quadrilateral, and measures 53 feet long by 39 feet wide externally, and has the four angles of the walls rounded off.

The entrance has originally been at the level of the hall, on the first floor, probably where the outer door still is, on the south side of the keep. It is now approached by a flight of stone steps, but the original access would be by a moveable wooden stair.

The first floor (Fig. 117), or the original common hall, has been greatly altered, but it has apparently entered by a door (now built up) immediately opposite the entrance door to the keep. This floor, now

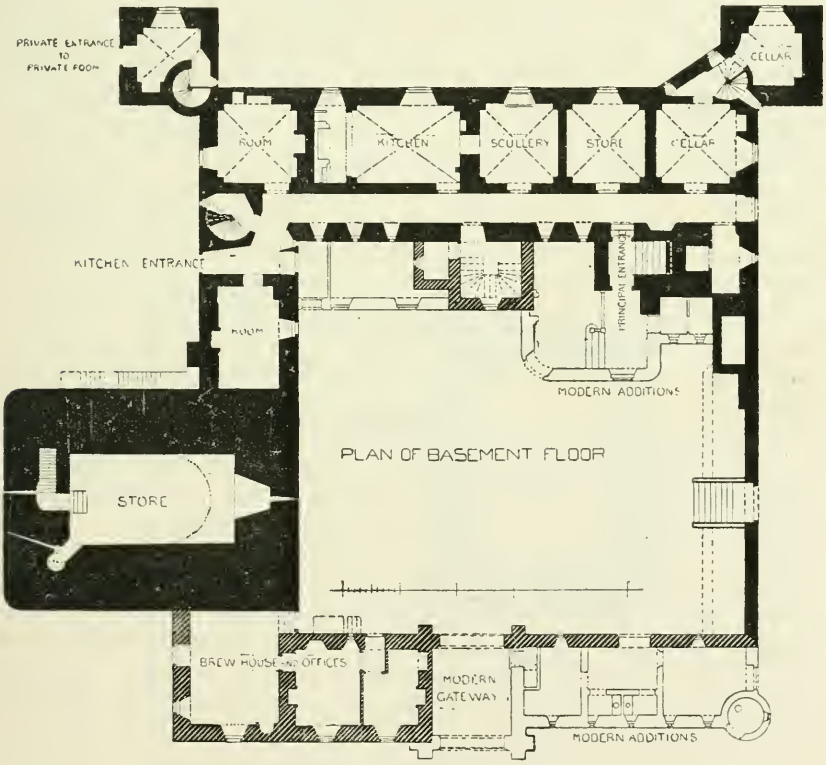


Fig. 118.—Drum Castle. Plan of Basement.

modernised, is covered with a barrel vault. The passage from the entrance leads to a newel stair in the angle of the tower, and also gives

access to a straight stair in the thickness of the east wall, leading to the basement floor (Fig. 118), which is vaulted, and measures 29 feet long by 15 feet wide. The walls of the basement are 12 feet thick, and are pierced with only two narrow loops at the east and west ends. In a recess in the north-east angle of the walls is the well, 3 feet in diameter, and furnished with a stone trough and drain to the outside.

Judging by the small windows, now built up, which are visible in the outer walls, there have been wall recesses off the hall on the first floor, and probably also a small entresol entering from the stair.

The second floor (Fig. 119) also consists of a single large hall the full size of the building, viz., 35 feet long by 21 feet wide. The walls are here about 9 feet thick. This space is covered in with a pointed barrel vault, measuring 24 feet from the floor to the apex; but this height has been divided into two with a wooden floor, the corbels for supporting which are visible in the walls on both sides.

The lower of these apartments was no doubt the owner's private hall, and the upper space, in the vault, contained bedrooms (as at Craigmillar, etc.) The hall is lighted with windows on every side, those in the north and south wall being 2 feet 3 inches wide and having stone seats in the recess. That in the west wall is a mere loop. There is a garde-robe in the north-west angle and a fireplace in the north wall.

The newel stair in the south-east angle does not go higher than this floor. The access to the upper floor and to the battlements seems to have been by a solid oak stair starting in the north-east angle of the hall, where some relics of the steps can still be traced.

It is said in the New Statistical Account of Aberdeenshire that the tower "had originally an alcoved roof of considerable height, which has long been removed, and one of less altitude with flat roof has been substituted."

The present slated roof rests on the pointed vault above referred to. Possibly there may have been formerly an attic floor above this vault, entering from the battlements, and serving as a guard-room. This is frequently the case, as at Borthwick, Clackmannan, Alloa, etc.

The battlements here are of unusual height (Fig. 120). This is caused by the stone gutter forming the parapet walk being stepped down from the angles to the centre of the east and west walls, where there is only one drain and gargoyle to let off the whole of the water from each end. The same stepping of the gutter is continued along the north and south sides, but there are two drains on each of those sides.

The parapet rests on a corbel table, which is continued round the circled angles of the building in a continuous string-course, above which the parapet is also rounded and heightened at the angles, but it does not project so as to form a bartizan of the usual form. The height from

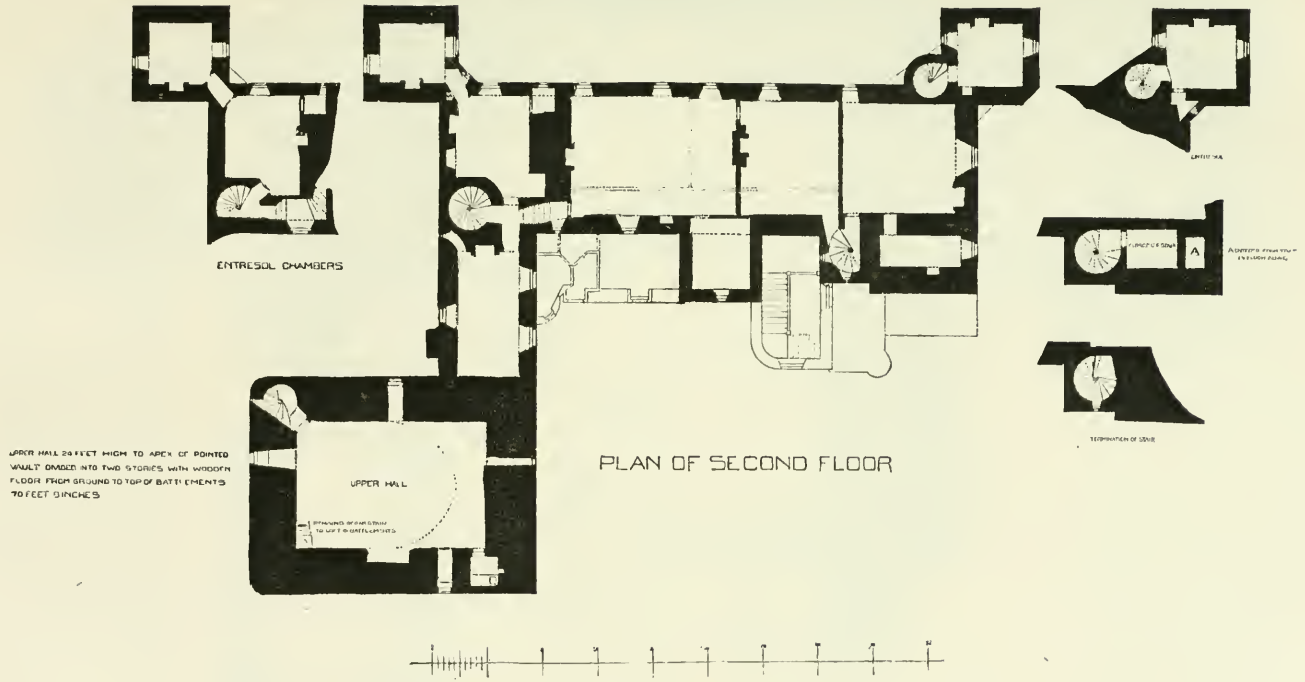

ENTRESOL CHAMBERS
UPPER HALL 24 FEET HIGH TO APEX OF POINTED VAULT DIVIDED INTO TWO STORIES WITH WOODEN FLOOR FROM GROUND TO TOP OF BATTLEMENTS 70 FEET 9 INCHES
UPPER HALL
PLAN OF SECOND FLOOR

FIG. 119.— Drum Castle. Plan of Second Floor.

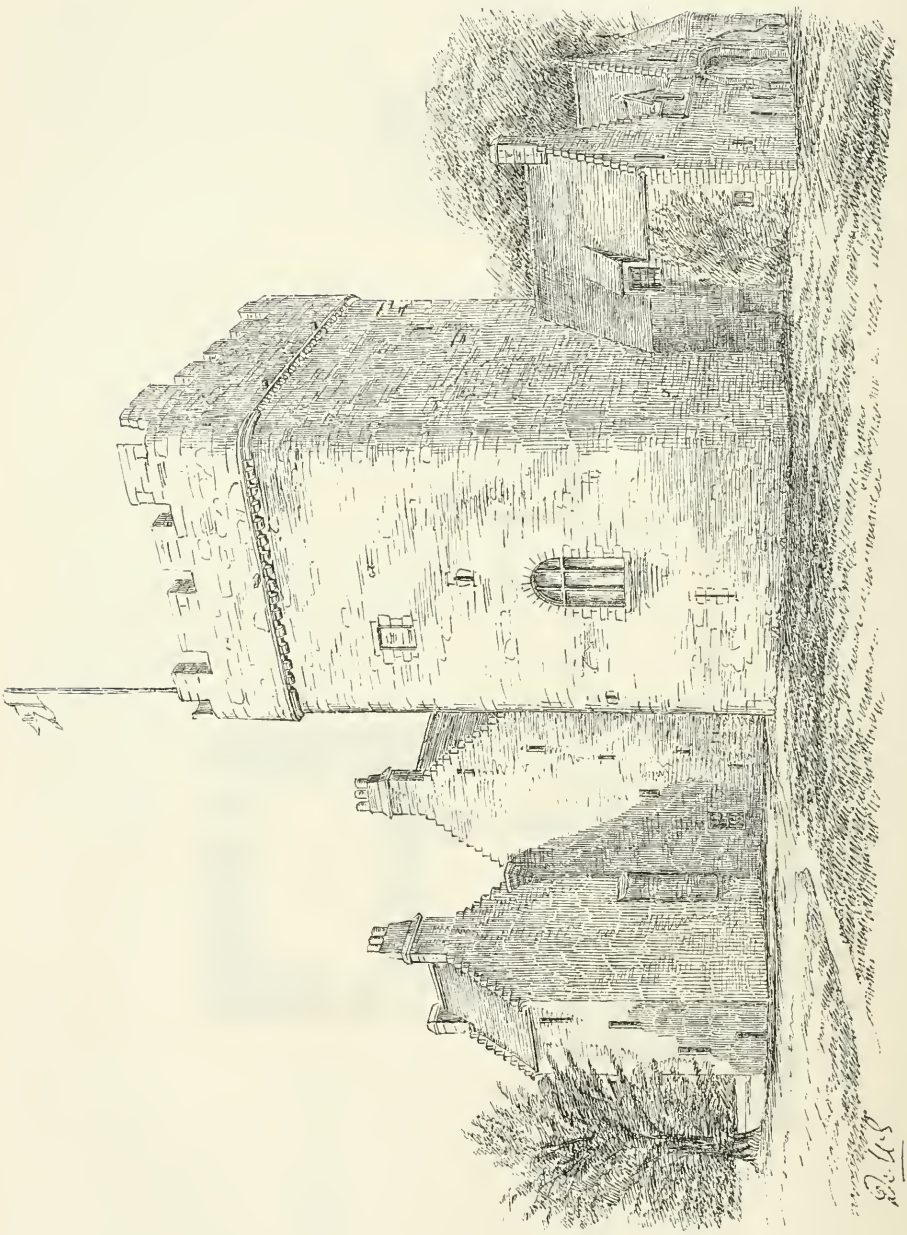


Fig. 120.—Drum Castle. The Keep from the North-East.

the ground to the top of the parapet is 70 feet 6 inches. Such rounded angles are by no means uncommon in castles of the fourteenth century; but there are few such perfect examples of the parapet carried round the corners as at Drum. Neidpath, in Peeblesshire, is, however, one similar specimen. The size and style of Alloa Tower, before it was altered, with its thick walls and massive battlements, are in general harmony with those of Drum, although Alloa differs in having the battlements provided with bartizans. The later portions of Drum belong to the seventeenth century, and will be described hereafter.

ALLOA TOWER.

Alloa Tower, situated within the grounds of the Earl of Mar, close to the town of Alloa on the Forth, has been a very large and fine keep, probably of the fourteenth century. The estate was bestowed in 1360 by King David II. on Sir Robert Erskine, Great Chamberlain, whose descendants became the Earls of Mar; and it still belongs to the Earl of Mar and Kellie. Unfortunately, the tower has been greatly altered,

Fig. 121.—Alloa Tower. View from the North-West.

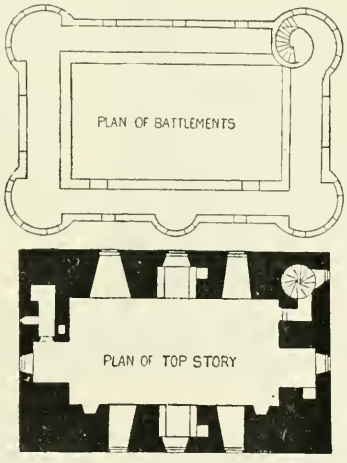


Fig. 122.

and its original features destroyed, the interior having been entirely remodelled, and the exterior cut up with a number of large inserted windows, all arranged at equal intervals, and a good many of which are actually *mock* windows (Figs. 121 and 123). The top story, which is shown on the plan (Fig. 122), has been comparatively little interfered with (except by the insertion of the four windows without seats

in the side walls), and, with the bartizans and battlements, gives a fair idea of what the original was. The hall was 43 feet 6 inches by 22 feet, and the walls are 10 feet thick. In two stories there are passages round the tower in the thickness of the walls. The height of the battlement is 80 feet from the ground. The original newel staircase in the south-west angle is still preserved, and the loopholes which light it are visible in the view from the west (Fig. 123). Additions

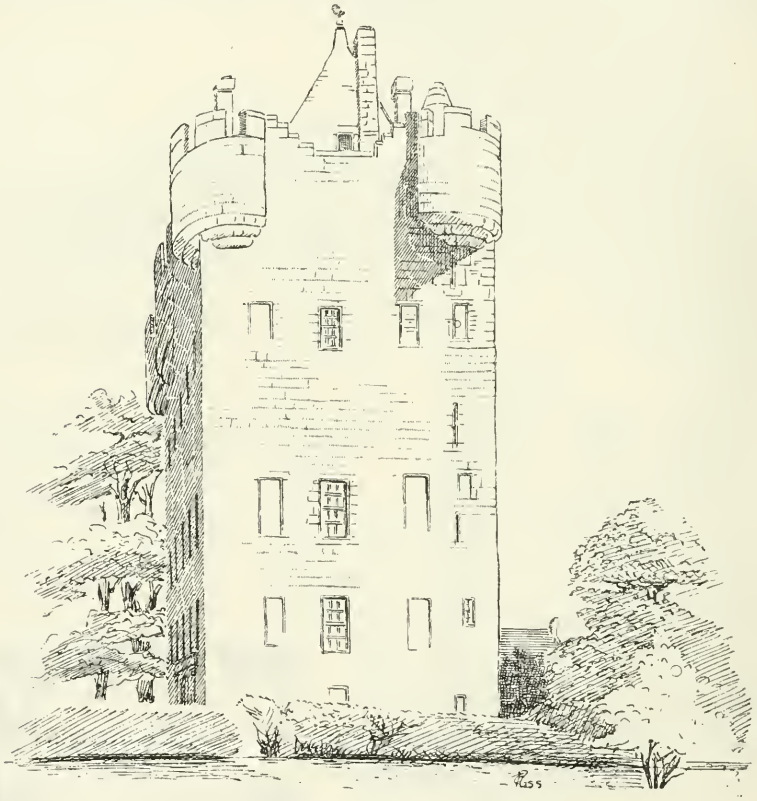


Fig. 123.—Alloa Tower. View from the West.

were made to the tower at a later date, when it was extended into the mansion where Queen Mary, James I., and Prince Henry spent much of their youthful time; but these additions were all destroyed by a great fire in 1800.

HALLFOREST, Aberdeenshire.

This is one of the very few examples of fourteenth-century keeps now remaining in the north. It is said to have been built by Bruce as a hunting-seat, and bestowed by him on Sir Robert de Keith, the Great Marischal; and it is still the property of the Earl of Kintore, one of his descendants. In 1639 it was the residence of the Earl Marischal, and was frequently attacked in the wars of the period.

The castle is situated on level ground about 1½ mile from Kintore, and was no doubt formerly surrounded with a wall and fosse. It is a plain oblong on plan (Fig. 124), 48 feet long by 30 feet wide. The walls are 7 feet thick. There are two vaults, one at about half the height of the tower, forming the floor of the hall, and the other at the top, supporting the floor under the roof. Each of these vaulted compartments would probably be divided into two stories in the height, with wooden floors. The principal entrance would be at the level of the hall floor at the south-east angle, where the aperture is still visible (Fig. 125), and where the remains of the circular well for the staircase to the battlements are traceable.

Fig. 124.—Plan of Ground Floor.

The loops of the basement are as usual very small. There was probably a door to the basement, for the admission of cattle, below that to the hall, where the long fissure in the wall is seen.

The windows on the upper floors have been larger. There was originally, no doubt, a parapet similar to that at Drum, and probably a stone roof upon an upper arch, but these are now demolished, and are quite inaccessible.

THREAVE CASTLE, Kirkcudbrightshire.

This lofty grey stronghold of the Douglases is of great interest, both from its connection with many important events in Scottish history, and also as a good specimen of the habitation of a powerful baron of the period, and of the style of architecture and defence then in use. It is situated on an island in the river Dee, about two miles from Castle Douglas, in Kirkcudbrightshire. The castle is reached (Figs. 126, 126A) by wading a ford on the eastern branch of the river about 20 yards wide at the lower or southern extremity of the island, and at a distance of about 200

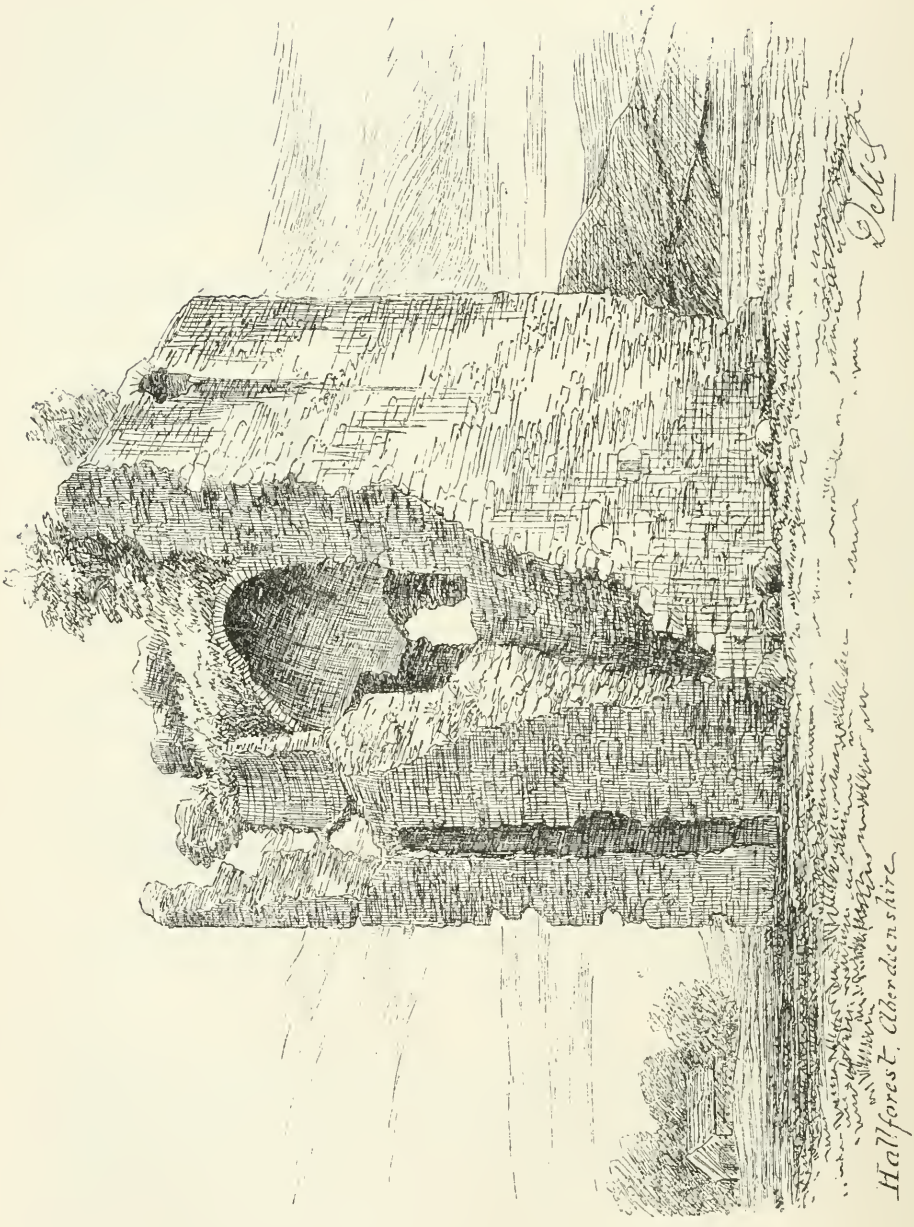


Fig. 125.—Hallforest. View from the North-East.

paces from the building. Above this ford either branch of the river can only be crossed by a boat. Proceeding from the southern extremity about 80 yards, a wide ditch or marsh, supplied from the Dee, contracts the approach to the castle to about 12 yards in width next the western stream.

The island, which is quite flat, extends about 500 paces northwards from the castle, and is about half this distance in width, forming a fine pasture meadow of nearly 20 acres in extent. The river protects the castle on the west at from 15 to 20 yards distance. On the other sides a strong wall with a sloping face and round towers still surrounds it, forming a courtyard about 15 feet wide on the south and east sides. The wall was most likely continued round the west and north sides, as shown by dotted lines, where the courtyard would be about 30 feet wide. The round tower at the south-east angle is entire, and is 9 feet 2 inches in internal diameter, and three stories high, with three loopholes in each story. The upper story was reached from the walls.

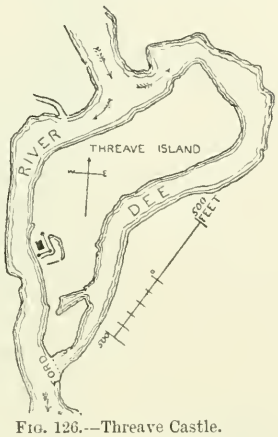


FIG. 126.—Threave Castle. Plan of Site.

The south-west tower (Fig. 127), about 9 feet from the river, has fallen, the greater part lying like a cylinder on its side, nearly entire. The north-east tower is almost a total ruin; enough, however, remains to show that it and the one overthrown were the same size as the existing tower.

The wall on the north side is gone, except a part of the foundation, shown by dotted lines. From the style of masonry of this wall, as well as from the form of the loopholes, it has possibly been rebuilt at a later date than the castle, but probably on the old foundations. Outside the wall there is a ditch, with a mound. (See plan of Island.) This mound encloses an outer court towards the east and south, of about 35 yards wide. There are scraps of masonry on this mound, so that it may have been a walled enclosure with the base of the wall raised some 4 or 5 feet above the general level of the island.

A noble entrance gateway (Fig. 128) (in a most deplorable state of dilapidation) leads through the east wall into the inner court, opposite which is the entrance to the keep. This gateway has been defended with a drawbridge, but there was no portcullis.

The castle (Fig. 126) is oblong on plan, measuring 61 feet from north to south, by 39 feet 4 inches from east to west, and is 63 feet from the parapet walk to the ground at the doorway, and 8 feet more to the highest part of the ruined parapets.

There is a central vault, 25 feet high, forming the floor of the hall, and

containing a lower and upper floor. Above the vault there were three wooden floors.

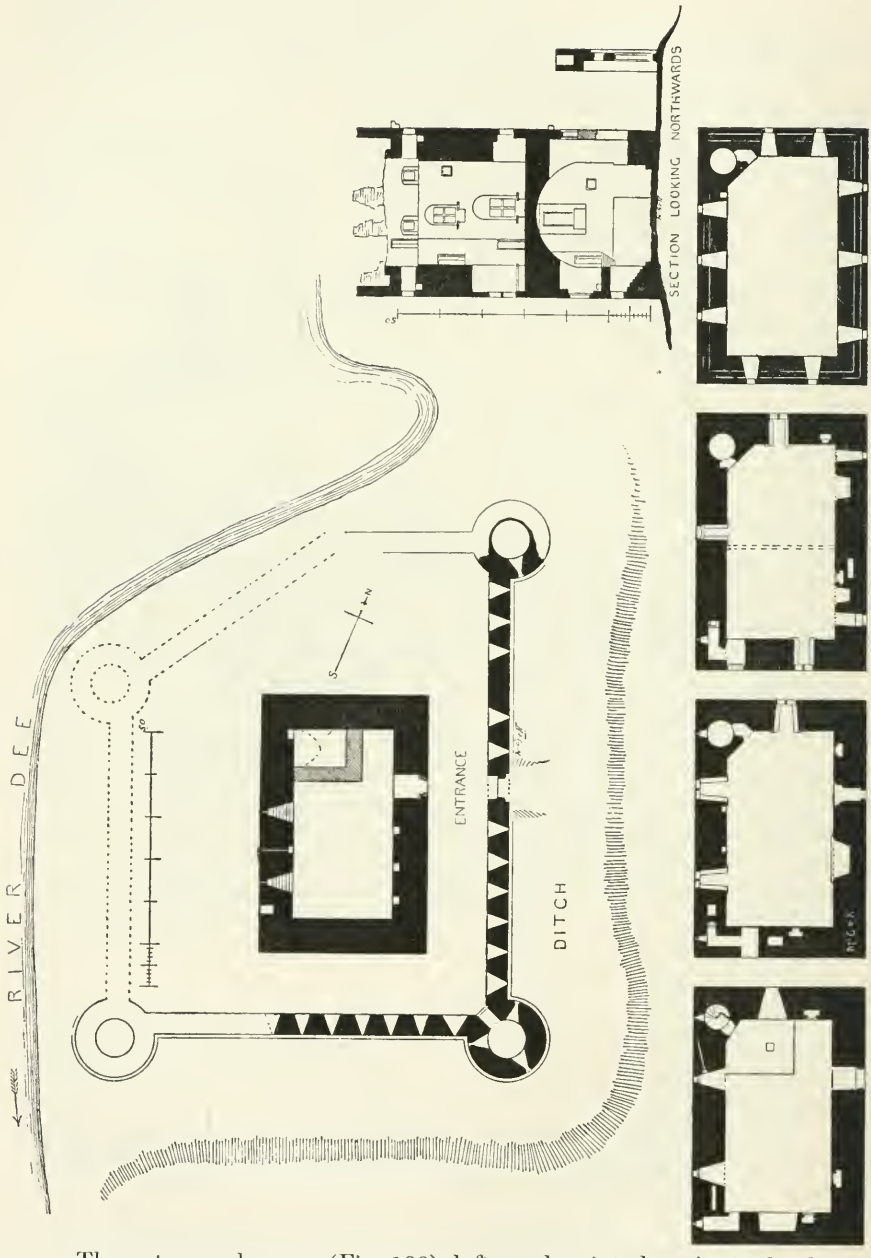


Fig. 126a.—Threave Castle. Plans and Section.

The entrance doorway (Fig. 128), lofty and pointed, and raised a few

feet above the ground, has been altered and built up in later times.

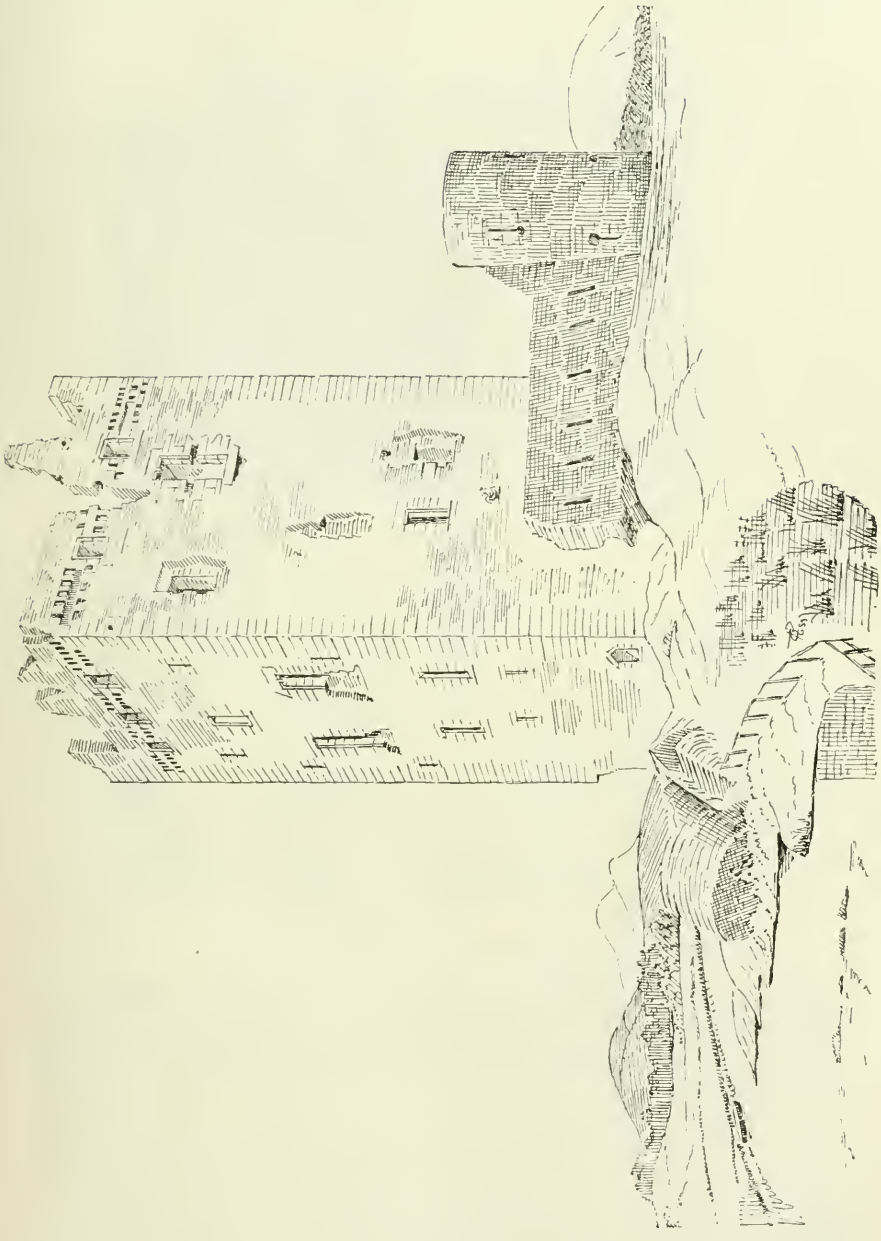


Fig. 127.—Threave Castle from the South-West.

leaving the arched top open to serve as a window (Fig. 129). The base-

ment must have been dark, having only two small windows in a wall about 8 feet thick. It contains the well, filled up and concealed with

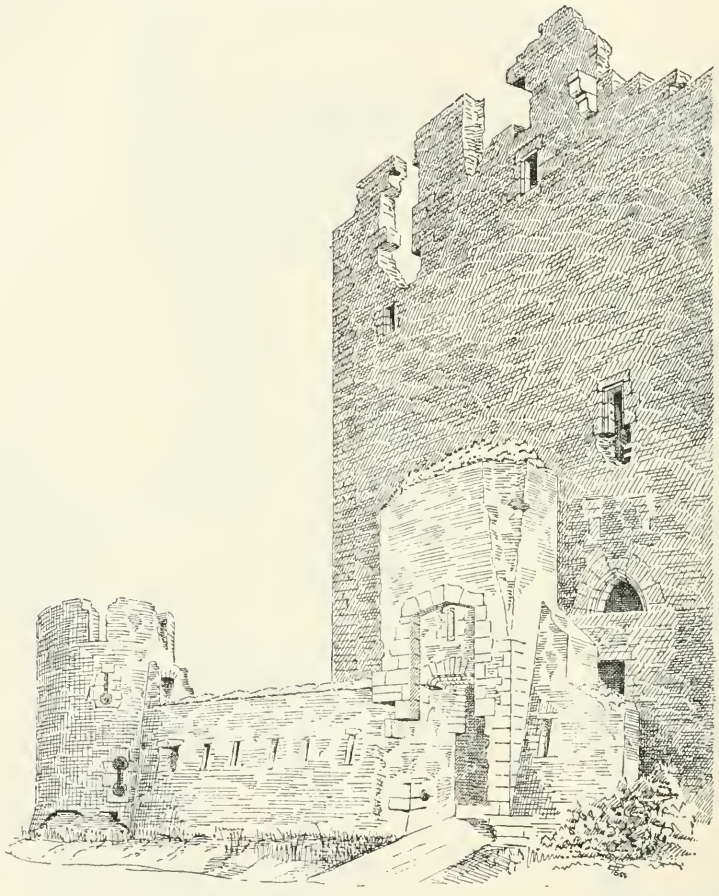


Fig. 128.—Threave Castle. East Front and Entrance Gateway.

rubbish, although within living memory it was clear to the bottom; but unfortunately large portions of the vaulting have fallen and heaped the place with ruins. Near the well is a drain from a sink, and the three recesses in the east wall were probably for buckets containing a supply of water to stand in.

In the north-west corner of the vault a dungeon with an arched roof has been walled off, and is entered from a hatchway at the floor level of the entresol. The kitchen seems to have been in the entresol, having a fireplace in the south wall, and a sink with a drain in one of the windows.

A doorway corbelled out over the dungeon roof leads to the staircase in the north-west angle of the building. From this corbelling it would

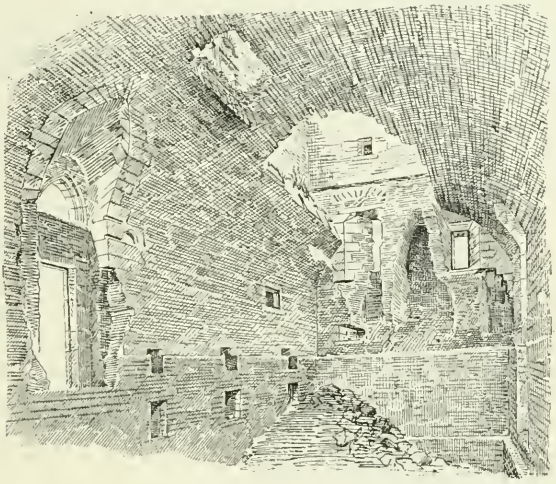


Fig. 129.—Threave Castle. Interior Basement Floor.

appear that the dungeon was an afterthought, as, had it been originally there, the corbelling might have been dispensed with, as the vault could have carried the projecting wall containing the doorway. This stair, the only one in the castle, leads to the upper floors and the battlements. It is now quite ruinous, not a single step remaining.

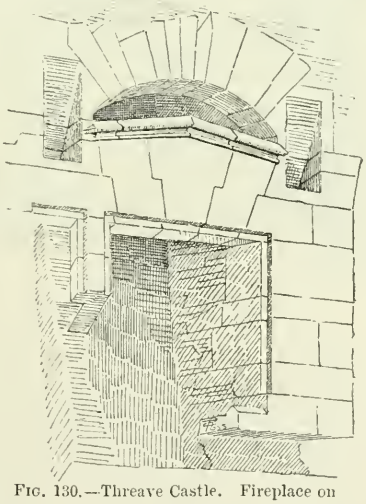


Fig. 130.—Threave Castle. Fireplace on Second Floor.

The great hall, 46 feet 3 inches long by 25 feet 5 inches wide, is lighted by side windows which had mullions and transomes, and were provided with stone seats. In the east wall there is an opening 2 feet wide, which seems originally to have been meant as a doorway, about 30 feet above the ground, but it has been converted into a window. About 4 or 5 feet below this doorway, on the outside face of the wall, there have been two corbels, now cut away (Fig. 128). These were evidently the rests for the beams of a bridge leading across to the top of the high entrance gateway, which apparently had no other mode of access. It would thus

form a post for watching and defence, and may also have been used in connection with the working of the drawbridge.

The fireplace (now destroyed) is alongside this doorway, and a garderobe leads off the window in the south-west corner of the hall.

The second floor is similar in arrangement. Its fireplace (Fig. 130) is quite entire, with a lintel, consisting of three stones with joggled joints, and its moulded cornice has a gentle rise to the centre.

The angle moulding on the lintel and jambs of this fireplace and that of the great hall is what is known as a "giblet check." The same moulding is used at several windows, as well as a hollowed chamfer.

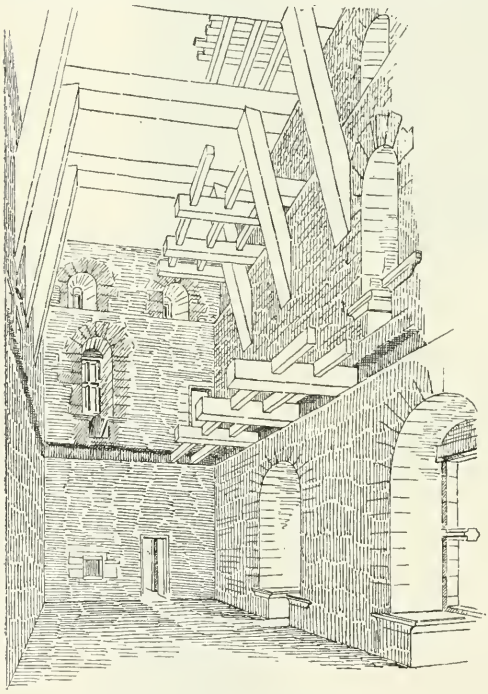


Fig. 131.—Threave Castle. Interior of Hall.

As will be seen from the sketch of this fireplace, there is a sunk rest at each side, shaped to receive the ends of struts for supporting the flat roof (Fig. 131). Similar holes exist along the whole wall, as also on the opposite side.

The upper floor has been entirely used in connection with the defence of the castle. The walls are pierced with windows on every side; and at the same level all round the outside of the north, south, and west fronts (Figs. 127 and 132) will be observed two rows of holes for carrying a hoarding, while in the centre of the wall (in the position shown on the section, and on plan by white lines) a narrow tunnel, 16 inches wide and 19 inches high, goes round the building, opening into the ingoings of the windows. This tunnel, just sufficient to let a man creep along, was evidently meant for giving access for securing the ends of the beams which carried the overhanging hoarding. It is one of the best preserved instances of this kind of defence in Scotland. On the east side there was no continuous hoarding, but over the doorway there were bold corbels projected to receive a hoarding to defend the gateway and entrance door, a very common arrangement. Only one of these corbels now remains, and is locally known as the "Hanging Stone."

Threave Castle is universally stated to have been built by Archibald

Douglas, an illegitimate son of the good Sir James Douglas, towards the end of the fourteenth century. Notwithstanding his illegitimacy he was appointed Lord of Galloway in 1369, and in 1389 succeeded to the Earldom of Douglas. He saw much of battles, both at home and abroad, having served at Halidon in 1333 and at Poietiers, 1356. In his government of Galloway he justly earned the sobriquet by which he is now known of "Archibald the Grim."

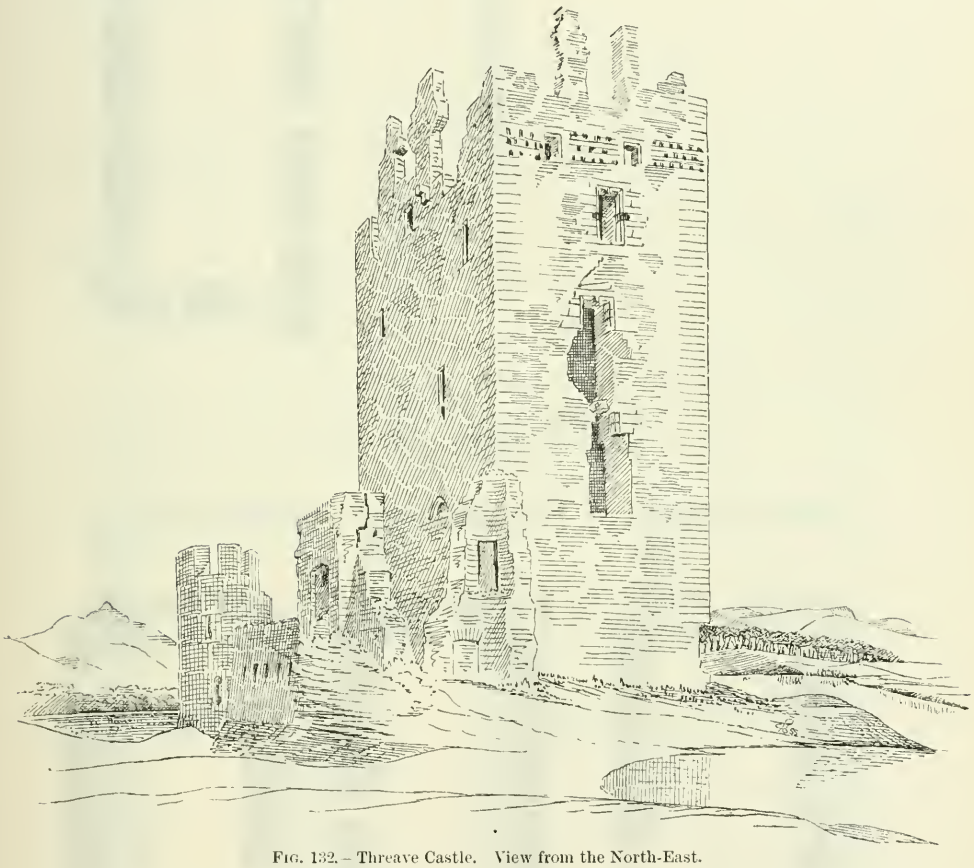


Fig. 132. – Threave Castle. View from the North-East.

He married Joan, daughter of Thomas Murray, Lord of Bothwell, and died at Threave on 3d February 1401. In 1455 the castle was forfeited by James, Earl of Douglas, to the King, who appointed keepers to hold it in his interests. Up to the time of the Covenanters it seems to have been a place of habitation, and was in the possession of the Nithsdale family, who were opposed to the Reformed religion. In 1640 its demolition was begun, when the War Council "ordaines the hows of Threave to be

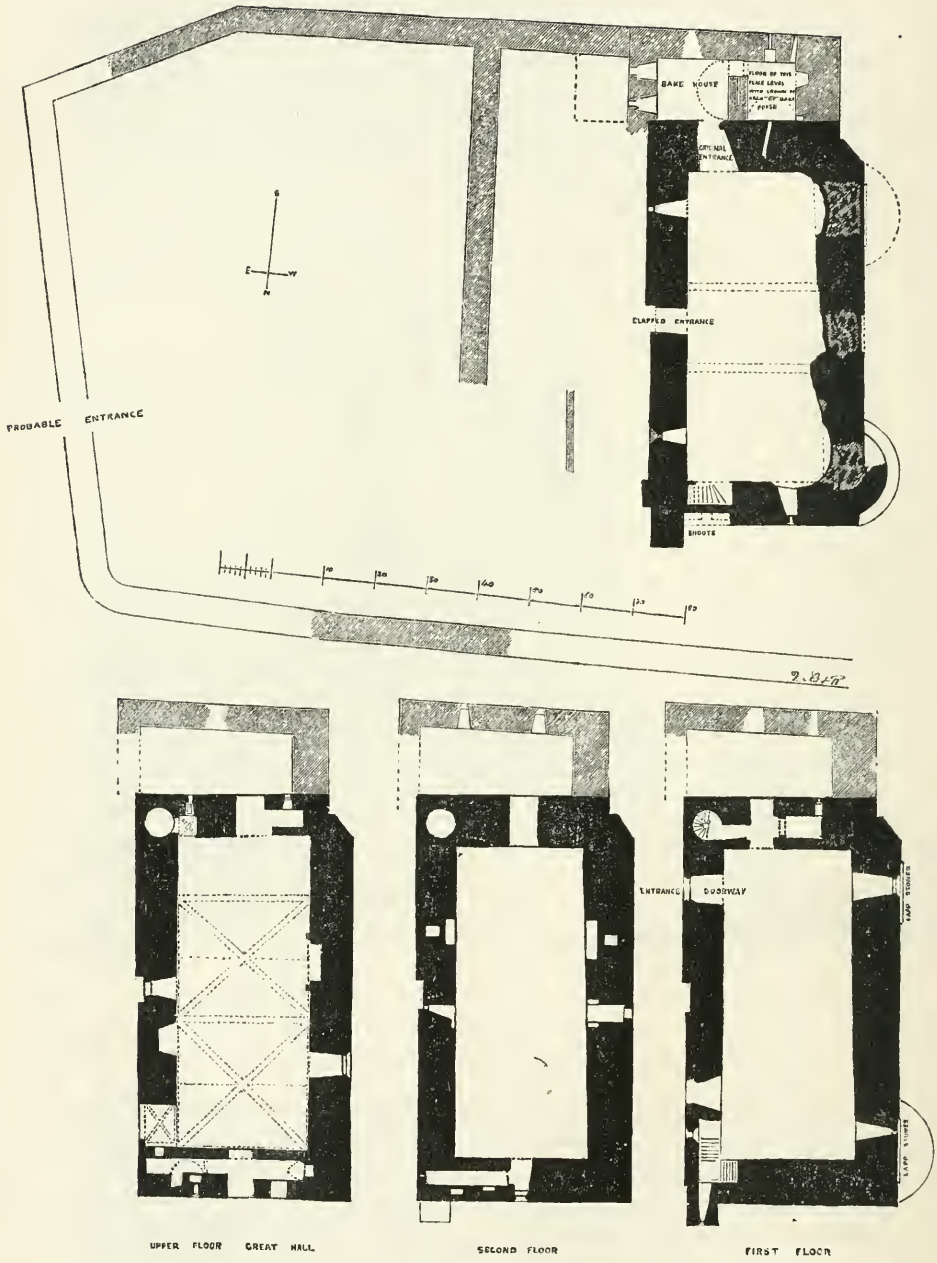


FIG. 133.—Dundonald Castle. Plans.

plighted." Also that "the sklait roofe of the hows and battlement thairof be taken downe, with the lofting thairof, dores and windows of the samen, and to tak out the haile iron worke of the samen." Power is further given to the Laird of Balmaghie "to work his will with the castle, and to put sex musqueteires and ane sergand thairin, to be enterteanit upon the public."[1] Now the work of demolition is being carried on surely and swiftly by the elements.

DUNDONALD CASTLE, Ayrshire.

The royal castle of Dundonald stands on the summit of an isolated, steep hill, and is a most conspicuous object for miles around. It is situated about 8 miles north from Ayr, and commands the wide expanse of level country lying in the basin of the Irvine and Garnock rivers. The base of the hill on which the castle stands was surrounded by a moat, part of which at present exists on the north-west side, and is full of water. There have been outworks at various parts of the hill, indicated here and there by green mounds. This castle was a favourite habitation of Robert II. and Robert III., the former of whom died here in 1390. It is therefore naturally on a much more extensive scale than most of the keeps of the fourteenth century, but it is of the same general plan. The building is of two periods. The original keep (Fig. 133) is an oblong block, 81 feet 8 inches by 40 feet, and as it now stands is 60 feet high, while its height when entire was not less than 10 feet more. It is divided in height into two pointed arched compartments (Fig. 134), the

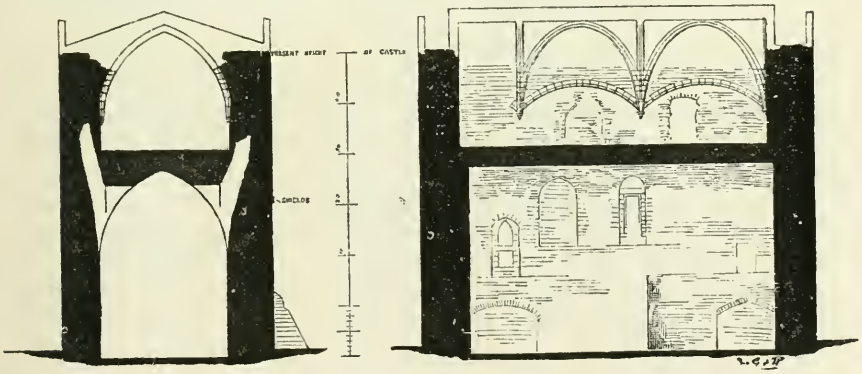


Fig. 134.—Dundonald Castle. Sections.

lower, which was partly subdivided into three stories, and partly into two with wooden floors, is 37 feet high, and the upper one, which is ruined, was about 25 feet high (Fig. 139A). The original entrance to the castle

[1] See MacKerlie's *History of Galloway*.

on the ground floor was at the east corner of the south wall. This, after the additions were made to the castle, became the door of communication between the old and the new buildings, while a new entrance was slapped out in the remarkable recess (Fig. 135) in the centre of the

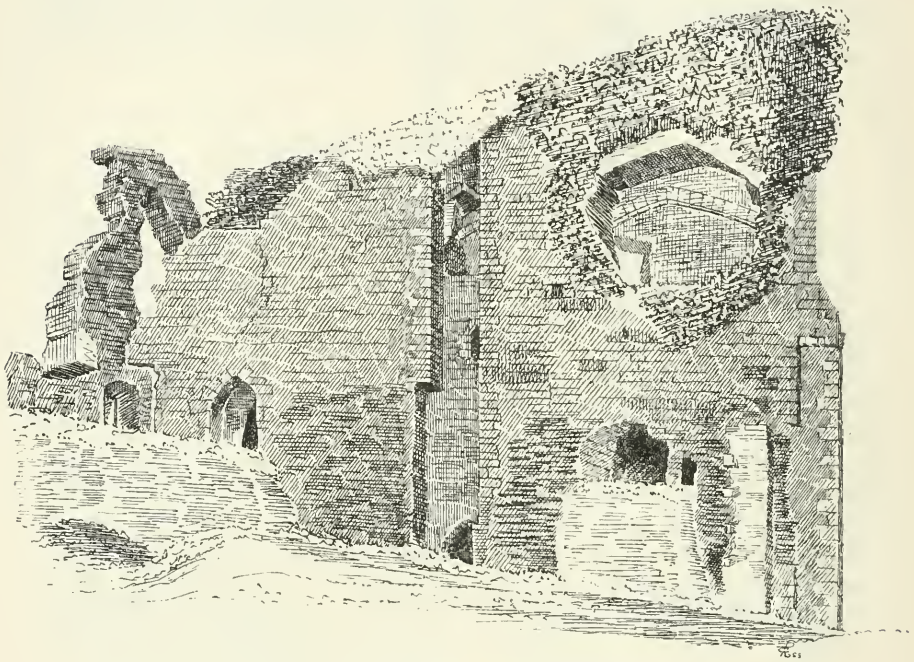


Fig. 135.—Dundonald Castle. View from the East.

east front. The ground floor was divided into three apartments, traces of the division walls being visible. The two end apartments have circular recesses, the northern one having a corresponding circular projection outside (Figs. 136 and 136A), built in a most markedly battered or sloping manner, the four top courses being perpendicular, and the whole covered in, at the height of about 15 feet, with a straight course of overlapping stones, all built with the most carefully dressed masonry. There was undoubtedly a similar projection corresponding to the recess in the other chamber at the south end of this front, of which only the overlapping stones remain, while the masonry bears marks of having been disturbed, and is now built up flush with the remainder of the wall. The interior of the ground floor shows portions of circular bays corresponding with the circular projections on the outside. The west wall is very irregular in shape on the inside of the ground floor, but on the first floor the inner face of the wall is straightened, thus leaving in some places a scarcement or set-off of unequal breadth on the top of the wall of the ground floor,

while in other places the regular wall of the upper floors projects over that of the lower floor. The whole of these features are somewhat puzzling, and there is a difficulty in understanding the design or reason for them. At first sight the external rounds naturally suggest ovens, which are often found projected beyond the walls. But this does not explain all the circumstances. On further consideration of all the features, we are inclined to think that the west wall is a survival of part of an ancient wall of enceinte. The rounds at each end are probably the bases of towers, which have been utilised in the construction of the

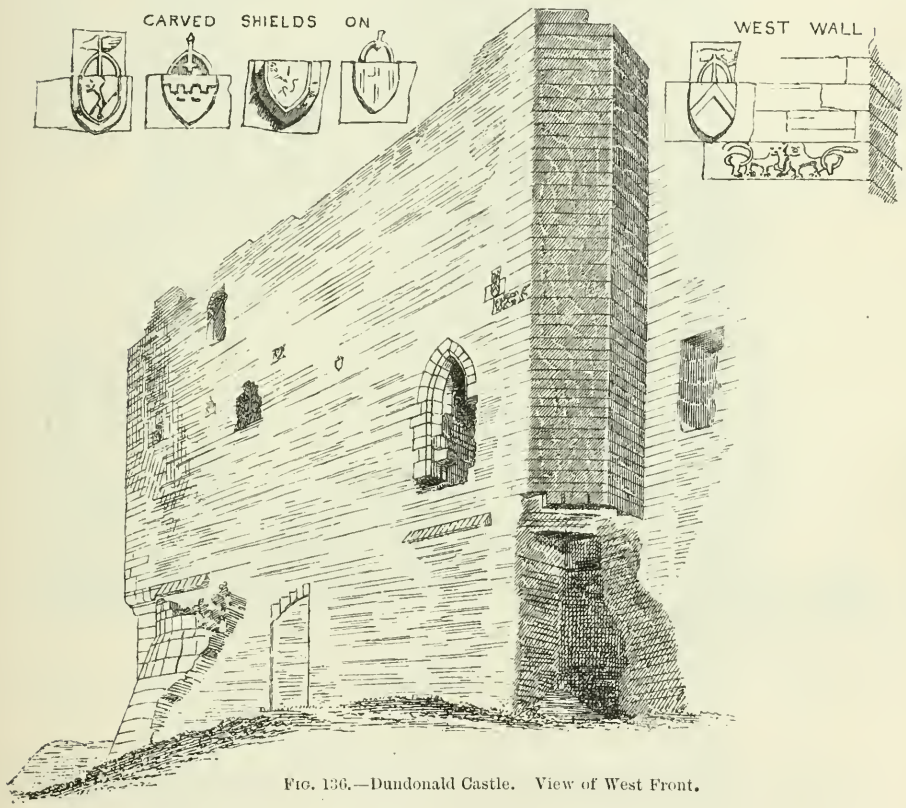


Fig. 136.—Dundonald Castle. View of West Front.

existing castle, much in the same way as that at Dirleton, above referred to (p. 116). This supposition explains the irregularity of the inside of the wall of the ground floor and the mode in which the upper wall is set upon it. It also accounts for the corbelling which is inserted at the exterior of the north-west angle to bring it out to the full thickness of the upper wall and the sloping cope on the top of the projecting rounds. At the north-east corner, and in the thickness of the walls, a stair leads

up to the first floor of the lower vault. The stair is lighted from a narrow slit carried through a buttress in the north wall (see plan of first floor and Fig. 136A). This buttress was probably only built as a screen for the closet shoots from the upper floors. There is another access to this floor at the south end of the east wall, by a pointed doorway about 15 feet above the level of the ground. This has been at some time a principal entrance doorway, but the arrangements at the doorway in the south wall immediately over the door to the ground floor seem rather to point to

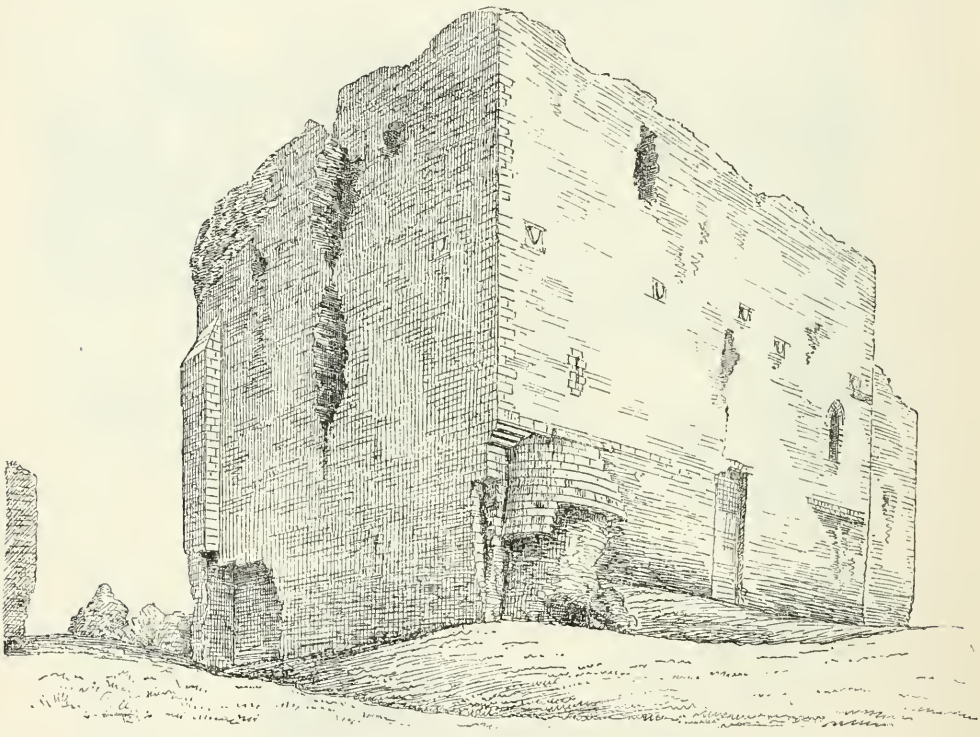


FIG. 136A.—Dundonald Castle. View from North-West.

it as the original entrance doorway. It is in close connection with the staircase, and is protected with a small guard-room. From the first floor a cork-screw stair in the south-east angle of the building leads to the upper vault. As already mentioned, there was a second floor in the lower vault, but it did not extend to the south end, probably only over the northern and central chambers of the ground floor, leaving the southern chamber at the main entrance the full height from the first floor level to the vault. In this southern chamber, or entrance hall, as it may be termed, are two singular recessed constructions in the side walls, and

opposite each other (Fig. 137), terminating in flues carried up doubtless to the battlements, where, if the earth and rubbish were removed, their exits would be found. These are in all essential respects similar to the flue and recess referred to at Yester, and seem to have been fireplaces, the overhanging part of the vault taking the place of the usual projecting

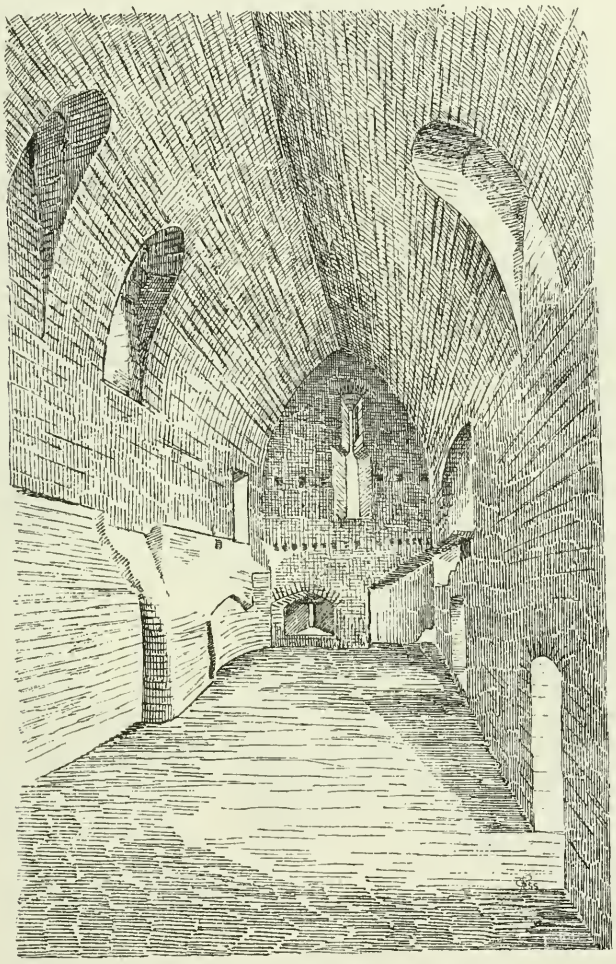


Fig. 137.—Dundonald Castle. Lower Vault, looking North.

hood (see section, Fig. 134.) The windows of this floor in the side walls are very curiously constructed at the inside jambs, as shown in the view looking south (Fig. 138).

The great hall (Fig. 139A), the roof of which is nearly all gone, has been a very noble apartment, 60 feet 6 inches long by 25 feet 6 inches wide,

and about 25 feet high (Fig. 139). It was vaulted with a pointed tunnel vault, with two bays of about 25 feet each, having transverse and diagonal

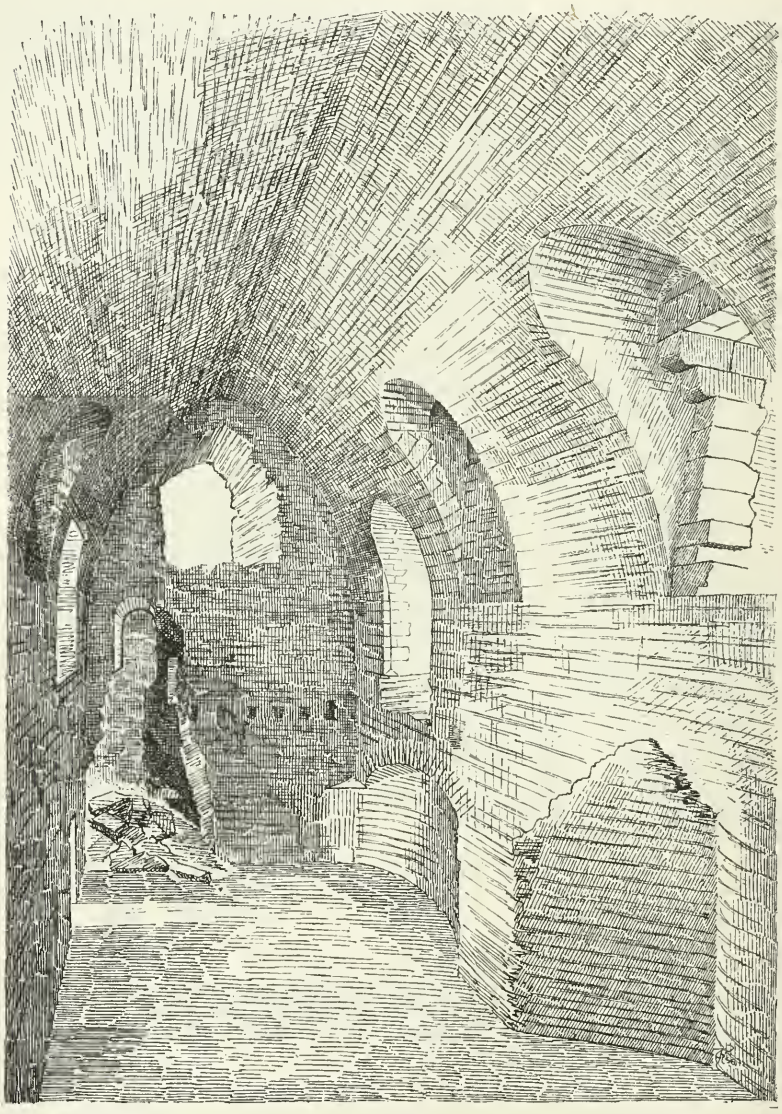


Fig. 138.—Dundonald Castle. Lower Vault, looking South.

moulded ribs of large section, measuring $14\frac{1}{2}$ inches across by $10\frac{1}{2}$ inches in depth, with very depressed wall ribs between, formed of an arc of a circle. These ribs spring from corbels (Fig. 139A), and are merely

ornamental, and not constructional, like those of a truly groined vault. Here the ribs are merely applied to the surface of the barrel vault (which does not require their aid), while in a properly groined vault the ribs bear

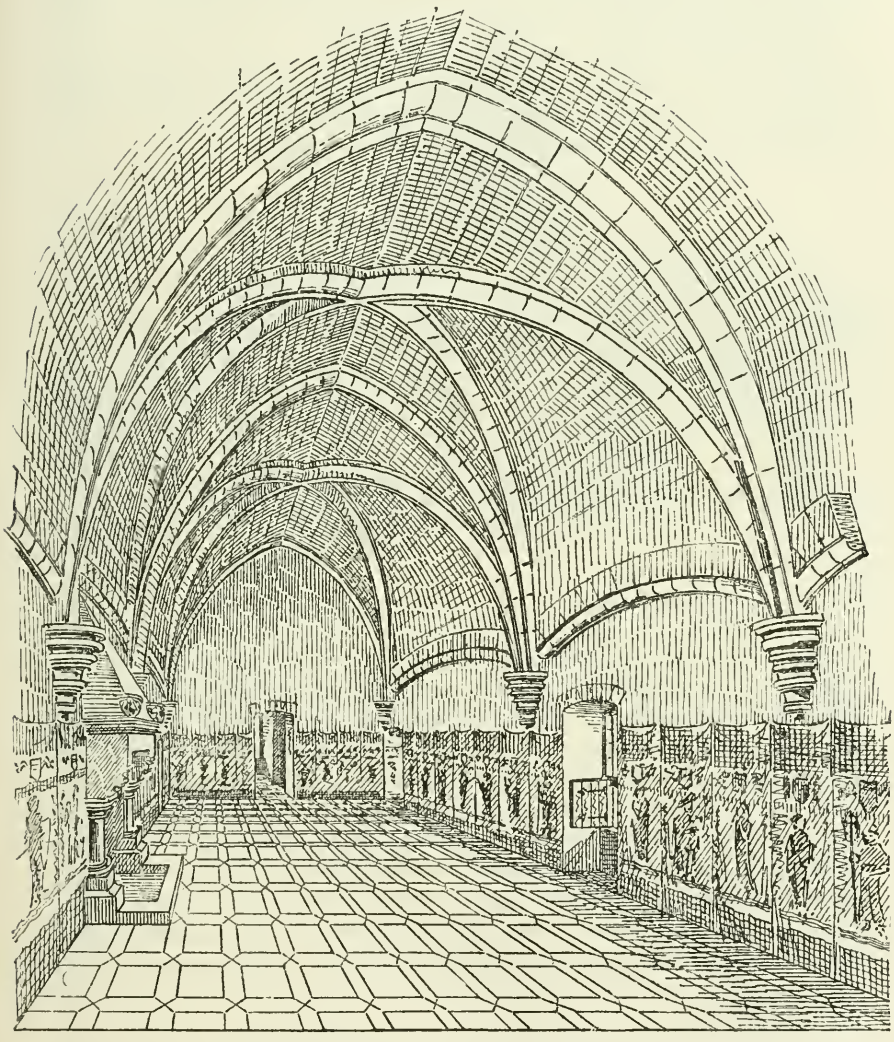


Fig. 139.—Dundonald Castle. View in Great Hall, restored.

the weight of the filling in of the vault's surfaces between the ribs. The method adopted at Dundonald was often followed in the vaulting of Scotch churches, as for example at St. Giles', Edinburgh, Paisley Abbey, etc., being easier of construction than true groined vaulting. The re-

maining portion of the roof, about 11 feet in length, next the staircase, and forming the "sereens," had no ribs, but it evidently was intended that it should have the wall rib, as the springer is wrought for it on both sides, while no springer is wrought for the diagonals. A drain for the "sereens" exists in the groined stair landing, and there is also a small mural closet for utensils (see plan of hall). The fireplace of the hall was in the west wall, but it is quite ruinous. The north-east window was of considerable size, with a groined ceiling, and in the thickness of the north wall there are several closets with vaulted roofs.

Fig. 139A.—Dundonald Castle. Interior of Hall.

At a later period extensive additions were made to the castle (Fig. 140). It was lengthened at the south end to the extent of 17 feet 6 inches by a breadth of about 34 feet, and carried up as high as the original castle, from which the various rooms of this addition entered. On the ground floor was a bakehouse, with ovens projecting outside into the inner bailey, but the bakehouse and ovens are so choked up with rubbish and ruins that their details are not easily made out. A room at the south-west corner enters off from above the arched roof of the bakehouse, the door of which was strongly secured against the inmates with a sliding bar. It may have been a dungeon, being provided with a drain to the outside, a fireplace, and a communicating drain to the main building. This portion of the castle is in such a ruinous state that it cannot further be described.

In line with the south wall of this addition the bailey wall extends eastwards for about 120 feet. It is 5 feet 6 inches thick, and in some parts 15 feet high. The breadth of the bailey is on an average about 121 feet. The entrance was probably in the east wall, and in confirmation of this idea there are the remains of outworks about 16 yards in front of this wall on the brow of the hill and on either side of the pathway.

The castle garth was divided into an outer and inner court by a wall 5 feet thick, running parallel with the east front of the castle, and about 30 feet distant from it. In the centre of this space are the ruins of another parallel wall 16 inches thick, probably for offices. There is a

Fig. 140.—Dundonald Castle. View showing Additions at South End.

series of shields with armorial bearings (Fig. 136), carved at intervals along the west wall. Two of these contain the Royal arms and the Stewart arms, but the others are not now legible.

TORTHORWALD CASTLE, Dumfriesshire.

This ruinous memorial of the power of the middle ages is situated on high ground overlooking Lochar Moss, about 4 miles east from Dumfries, the ground rising considerably higher than the castle to the eastwards. This castle has, on a smaller scale, a good deal of the massive character of Dundonald. It is an oblong keep on plan (Fig. 141), measuring 56 feet 6 inches by 39 feet 2 inches over the walls by about 45 feet high from the ground to the inside apex of the upper pointed vault. The building is divided into two compartments in the height, with stone vaults. The lower vault was semicircular, about 15 feet high, and contained two floors. The upper vault is pointed, and built with dressed ashlar. Nearly the whole of the north gable and about half of the west wall are gone. The

entrance to the lower vault was apparently through the centre of the north wall. How the upper floors were reached cannot exactly be determined, but on the outside of the east wall, at the level of the upper floor of the lower division, where marked on plan, there is a round arched doorway, which has been long ago built up and a small window inserted in it. This has probably been the main entrance originally, although it cannot be traced on the wall inside.

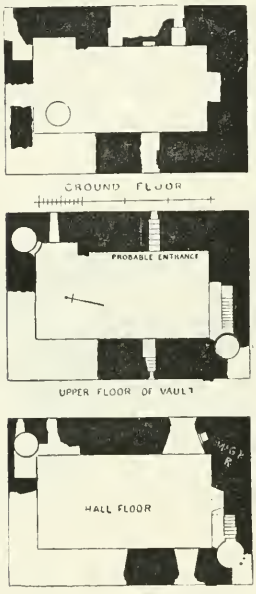


Fig. 141.—Torthorwald Castle. Plans.

From the upper floor of the lower vault a straight flight of steps in the south gable leads up to the hall floor, and to a spiral stair which runs to the top. Another spiral stair in the north-east corner leads to the hall only. The two floors in the lower vault were each divided into two apartments. Where the division wall abuts against the east wall there is a wide and straight joint in the masonry inside, continued up through the hall and the vaulting so far as it exists, which is shown on the sketch (Fig. 142). From this it would almost seem as if about 10 feet had been added to the length of the castle. If so, this must have been done at an early date, and probably before the building was finished. As favouring this view it may be pointed out that the exterior masonry of the portion first built is of rubble-work, while that of the supposed addition is in regular courses throughout its whole height, and similar ashlar-work is continued along the upper part of the older portion, all along the east and south walls, although not everywhere at a uniform level. From this we infer that when the addition was made the castle was in progress, and the change of masonry from rubble to ashlar was begun just at whatever level the walls chanced to be at. The upper vault had evidently been begun (it is of ashlar throughout), but the end gable was not built in nor the haunches of the vault quite finished when the enlargement and change was made. The castle has evidently been further heightened at a later time. A small portion of the masonry of this heightened wall still stands at the south-east corner, showing rubble-work on the outside above the ashlar-work just referred to.

The earthworks round the castle (Fig. 143) are extensive, especially to the north and east, and partly to the south, while on the west they have probably been obliterated by the plough. As in other cases, to which we shall afterwards have occasion to refer, these earthworks have

probably been part of the defences of a primitive fortress, long before the site was occupied with the present castle.

The castle was surrounded with a courtyard having a steep glacis, beyond which were a ditch and mound, succeeded by a marsh fed by a burn at the south end. Beyond the marsh there is an outer rampart.

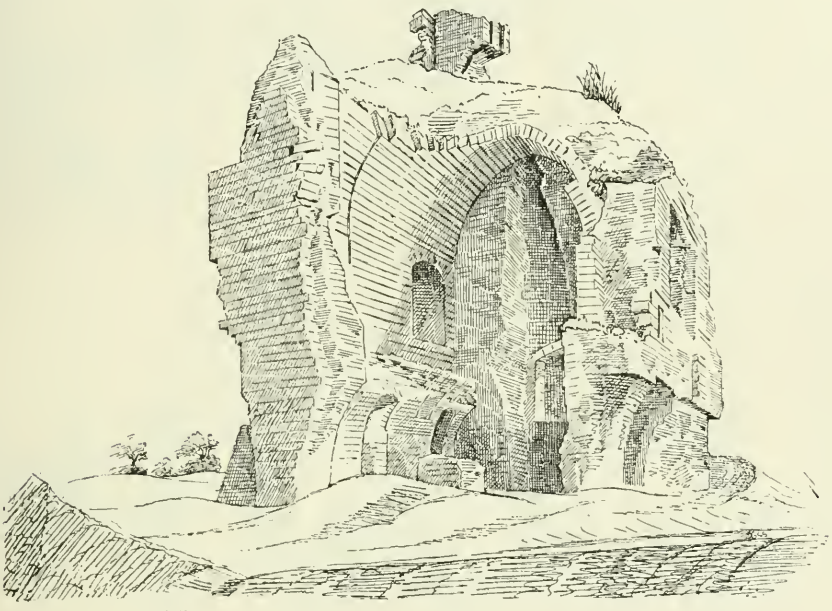


Fig. 142.—Torthorwald Castle from the North-West.

Torthorwald was the early home of the Carlyle family, who were for centuries connected with this district. We learn from Mr. Froude that Thomas Carlyle was not displeased to know that there ran in his veins the blood of the Lords Carlyle of Torthorwald. He says himself, "What illustrious genealogies we have; a whole regiment of Thomas Carlyles, wide possessions, all over Annandale, Cumberland, Durham, gone all now into the uttermost wreck,—absorbed into Douglasdom, Drumlanrigdom, and the devil knows what." One of these ancestors presented a bell to a church in Dumfries, which still hangs in one of the steeples of that town, and on which the following inscription may be read, "GUILIELMUS DE CARLEIL, DOM. DE TORTHORWALD, ME SICUT FECIT FIERE IN HONOREM SANCTI MICHAELIS ANN. DOM. MCCCCXXXIII." (William de Carlyle, Lord of Torthorwald, caused me to be made in honour of St. Michael, in the year of our Lord 1433.) In 1333 we find Sir William Carlyle of Torthorwald issuing forth with his neighbours to Lochmaben, about four miles distant, to oppose an English raid, and dying

on the field, along with Sir Humphrey de Bois, an ancestor of Hector Boece the historian, and in 1346 Thomas Carlyle of Torthorwald was

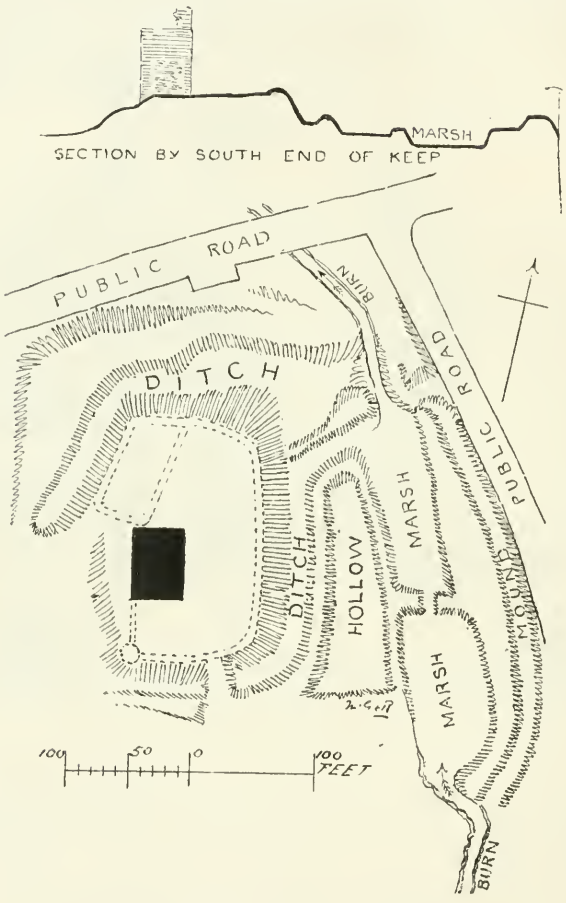


FIG. 143.—Torthorwald Castle. Plan of Site.

killed at Nevill's Cross. Either of these ill-fated men may have been the builder of the castle.

CLACKMANNAN TOWER, CLACKMANNANSHIRE.

This castle is interesting and instructive from its showing, by the various alterations it has undergone, the steps by which improvements were gradually introduced into similar keeps. It is situated on the top of a hill, on the eastern slope of which the town of Clackmannan stands.

King David II. granted a charter for this domain in 1359 to a relative

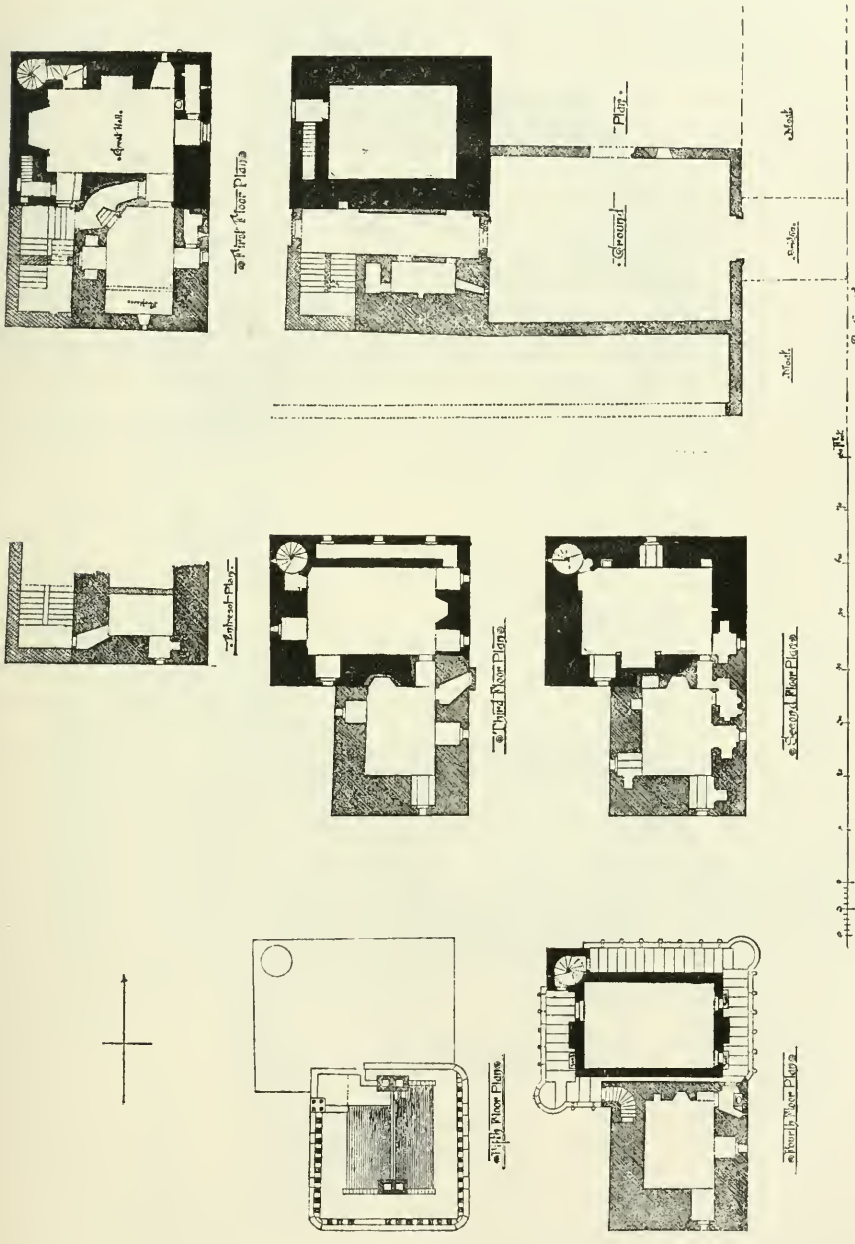


FIG. 144.—Clackmannan Tower. Plans.

of the name of Bruce, and the castle was still occupied by a descendant of the family till 1791.

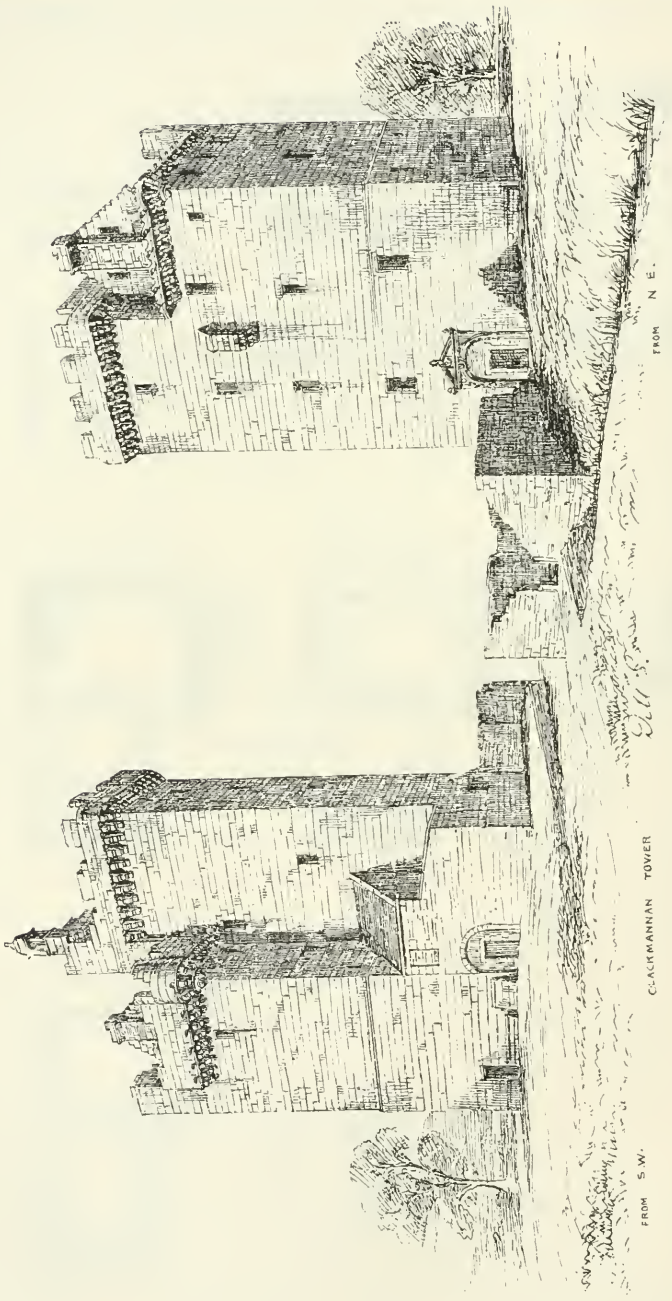


Fig. 145.—Clackmannan Tower. Views from South-West and North-East.

Here we have, first (Fig. 144), the original rectangular keep of the fourteenth century, 24 feet by 18 feet internally, with walls 6 feet thick (tinted black on plan). The entrance seems to have been on the ground level, with a straight stair, in the thickness of the wall, leading to the

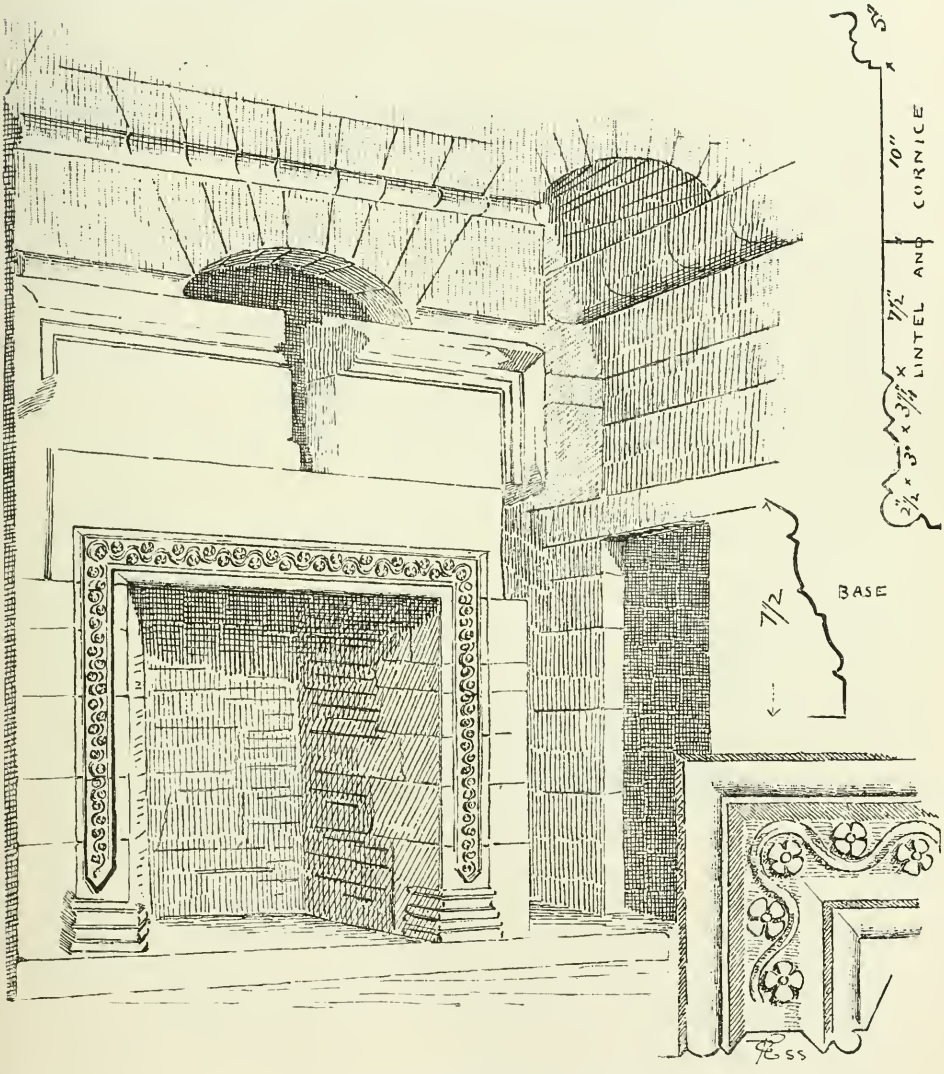


Fig. 146.—Clackmannan Tower. Fireplace.

hall on the first floor. Over this is the upper hall, with private rooms on the floor above, and an attic room in the roof for the garrison, entering from the battlements. These have bold corbels, but no machicolations (Fig. 145). In the thick walls there are the usual chambers for garde-

robes and deep recesses for windows, with stone seats. On the third floor a garderobe is projected on corbels from the wing. (See N.E. view.)

In the fifteenth century this accommodation was found to be too limited, and the south wing (hatched on plan) was then added. The entrance to the keep seems then to have been made by a door in the re-entering angle on the first-floor level, with a passage cut through the south wall to the hall. The new wing provided the additional accommodation which was now found requisite, viz., a kitchen on the first floor, a private room on the second floor, adjoining the upper or private hall, and bed-rooms on the upper floors.

The fireplace of the private room (Fig. 146) is fine, and, by its style, together with other evidence, fixes the date of this wing towards the end of the fifteenth century. It should also be noticed that there is a wash-hand basin, with a drain to the outside, in the east wall of the hall, a feature which is to be found at Sauchie and other castles of various periods. It is remarkable, and quite unusual, that the wing added should be carried, as in this case, higher than the original tower. The corbels and machicolations of the parapet, with the rounded angles of the addition, are well preserved, and have a fine effect; and it is worthy of notice that these bold corbels and open machicolations, which are often regarded as archaic features, here belong to the more recent part of the building. A century later still further improvements were considered necessary. The entrance on the first floor was found inconvenient, and to remedy this a new entrance passage, 9 feet in width, was formed through the south wing, and led to a wide straight staircase, which was constructed so as to fill up the space between the wing and the main building. This staircase gives easy access to the doorway on the level of the first floor, and also, at the level of the first landing, to an entresol room in the south wing, which was probably used as a guard-room. The staircase blocks up one of the windows in the kitchen, which was therefore converted into a cupboard. One of the hall windows is also enclosed, but it is allowed to remain as a borrowed light in the staircase. The stair is continued a few steps higher, to a door which opens upon a platform or balcony on the roof of the lower part of the addition. (See view from S.W.)

The eastern entrance doorway has a Renaissance arch and entablature, which shew that this work belongs to the seventeenth century. The picturesque belfry on the watch turret is also of this date. The walls enclosing the fore court, with the moat and drawbridge in front, and enclosing walls round the keep, portions of which still exist (see Plan), were also constructed about this time.

NEIDPATH CASTLE, Peeblesshire.

The picturesque castle of Neidpath, near Peebles, was for centuries the residence of the Hays of Yester. In 1654, the Earl of Tweeddale, a distinguished statesman, enlarged the building, erected stables and con-

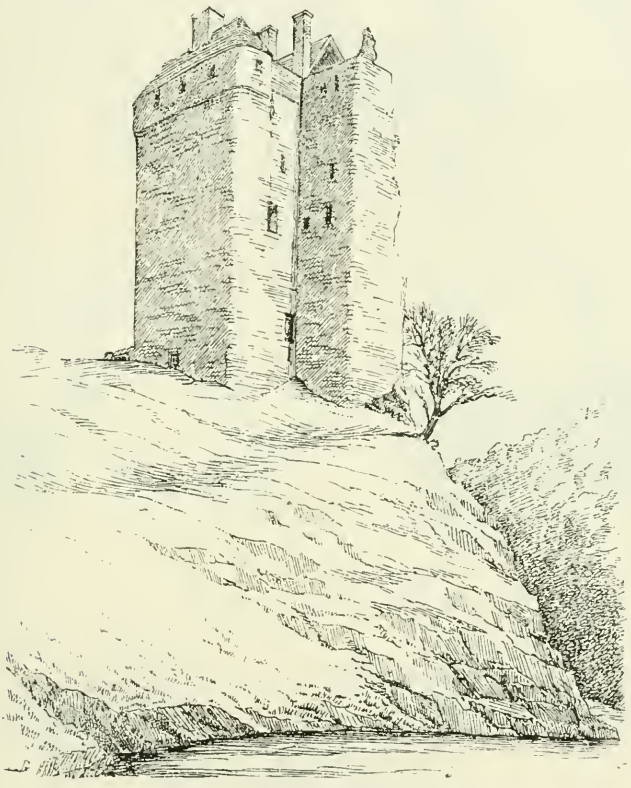


Fig. 147.—Neidpath Castle. View from the North-West.

structed fine terraced gardens, a few remains of which are still visible. The castle stands on a high projecting rock overhanging a sudden bend in the Tweed, which forms a deep pool at the base of the rock (Figs. 147, 148). This castle is built on the L plan, *i.e.* with a small wing at one side (Fig. 149). The peculiar shape of the plan, with walls at oblique angles, probably arises from the nature of the site. It has originally been a keep of great strength, the walls being over 10 feet thick. The original door (plan of basement floor) was on the most precipitous side of the site, above the river. It entered on the ground level, and communicated with the upper floors by a turnpike stair in the wall. The partitions shown on the basement floor are not original. The tower

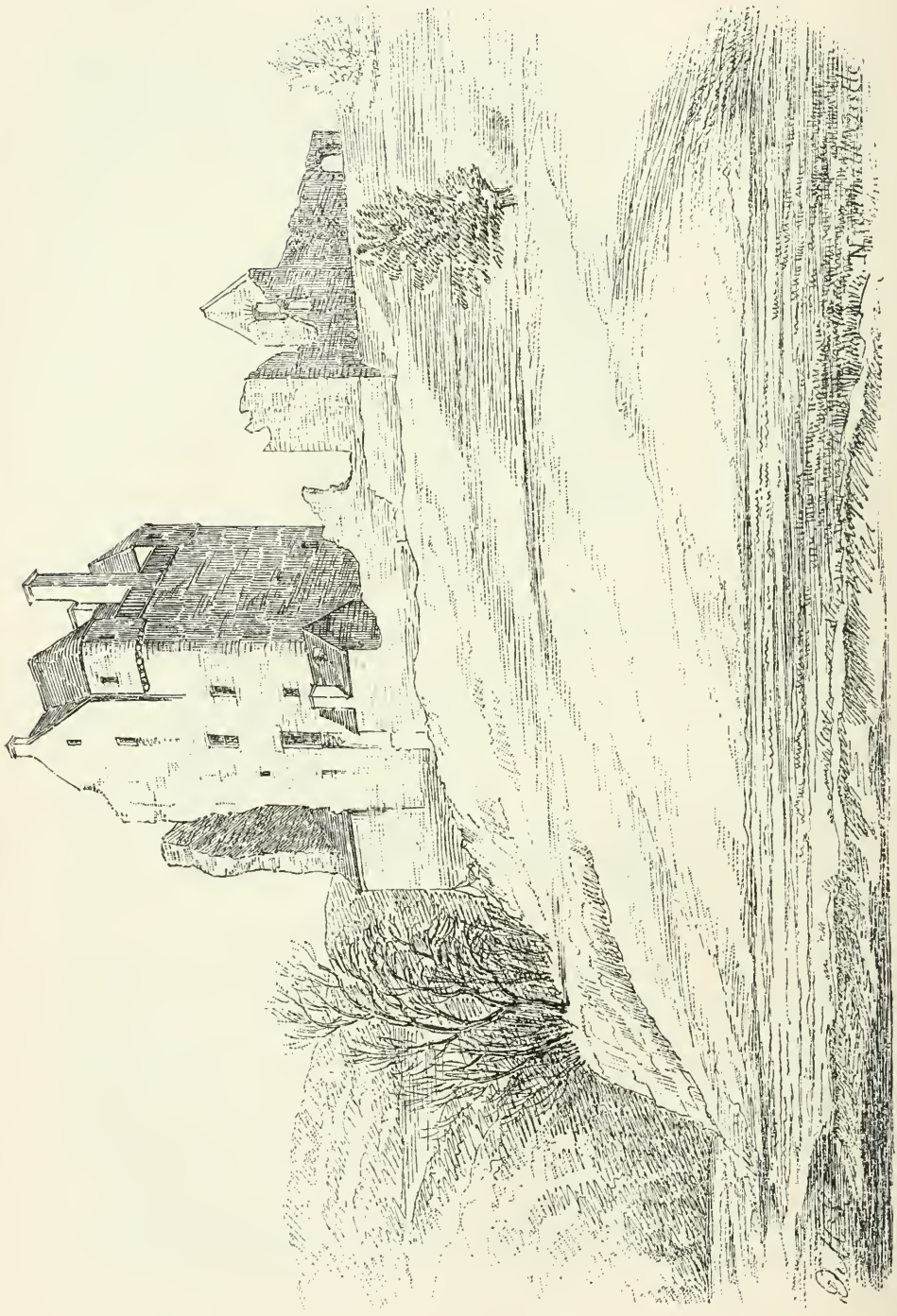


FIG. 148.—Neidpath Castle. View from the South-East.

was divided into two principal compartments in its height (Fig. 152,

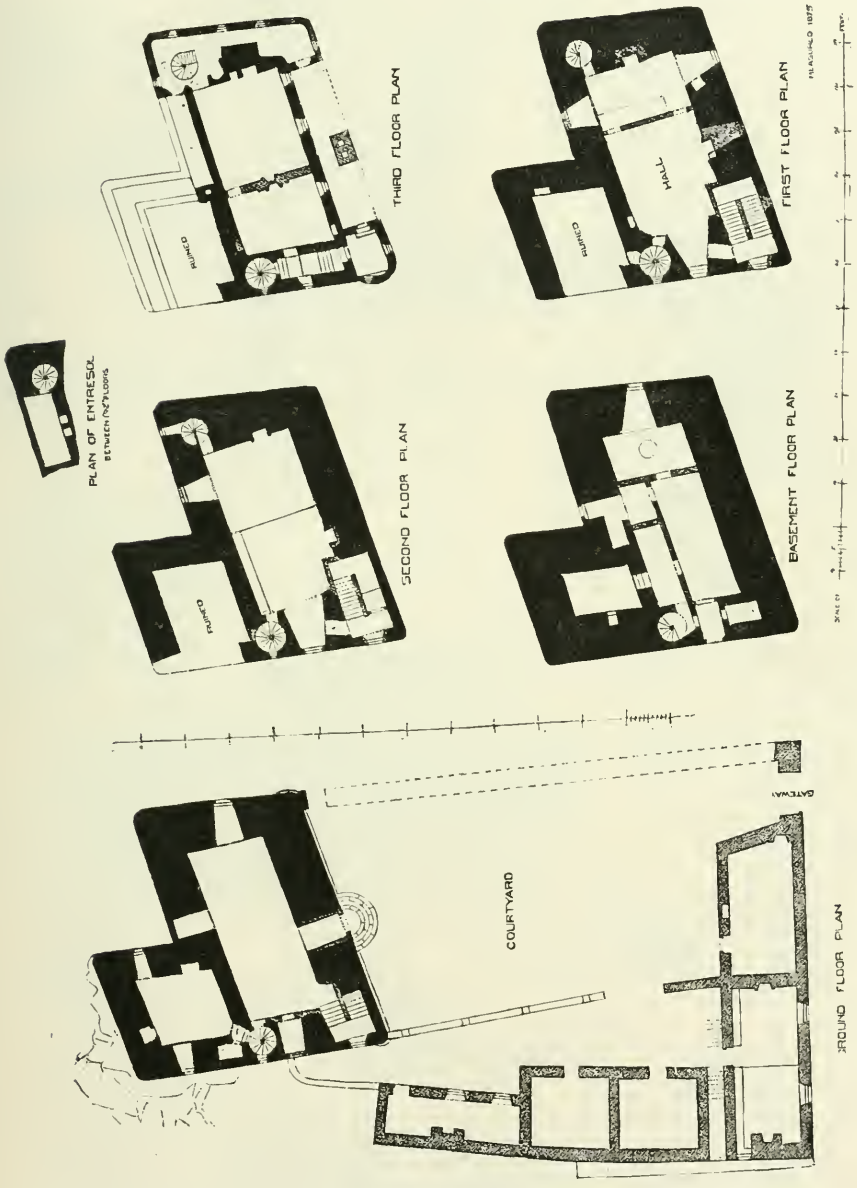


Fig. 149.—Neidpath Castle. Plans.

p. 188) by a vault. There was also a vault near the level of the parapet, and probably another vault carried the roof, each of the principal compartments being subdivided into two stories with wooden floors. The

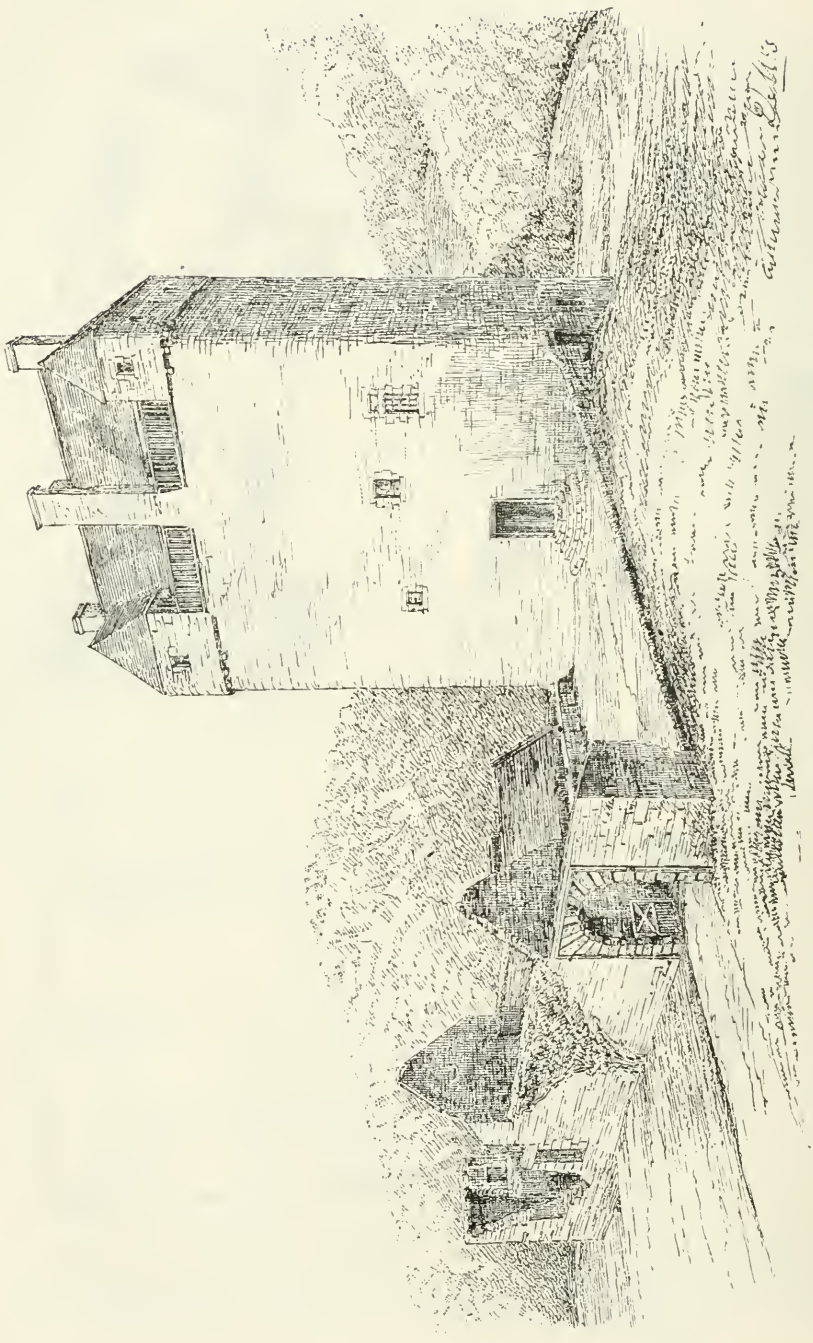


Fig. 150.—Neidpath Castle. View from the North-East.

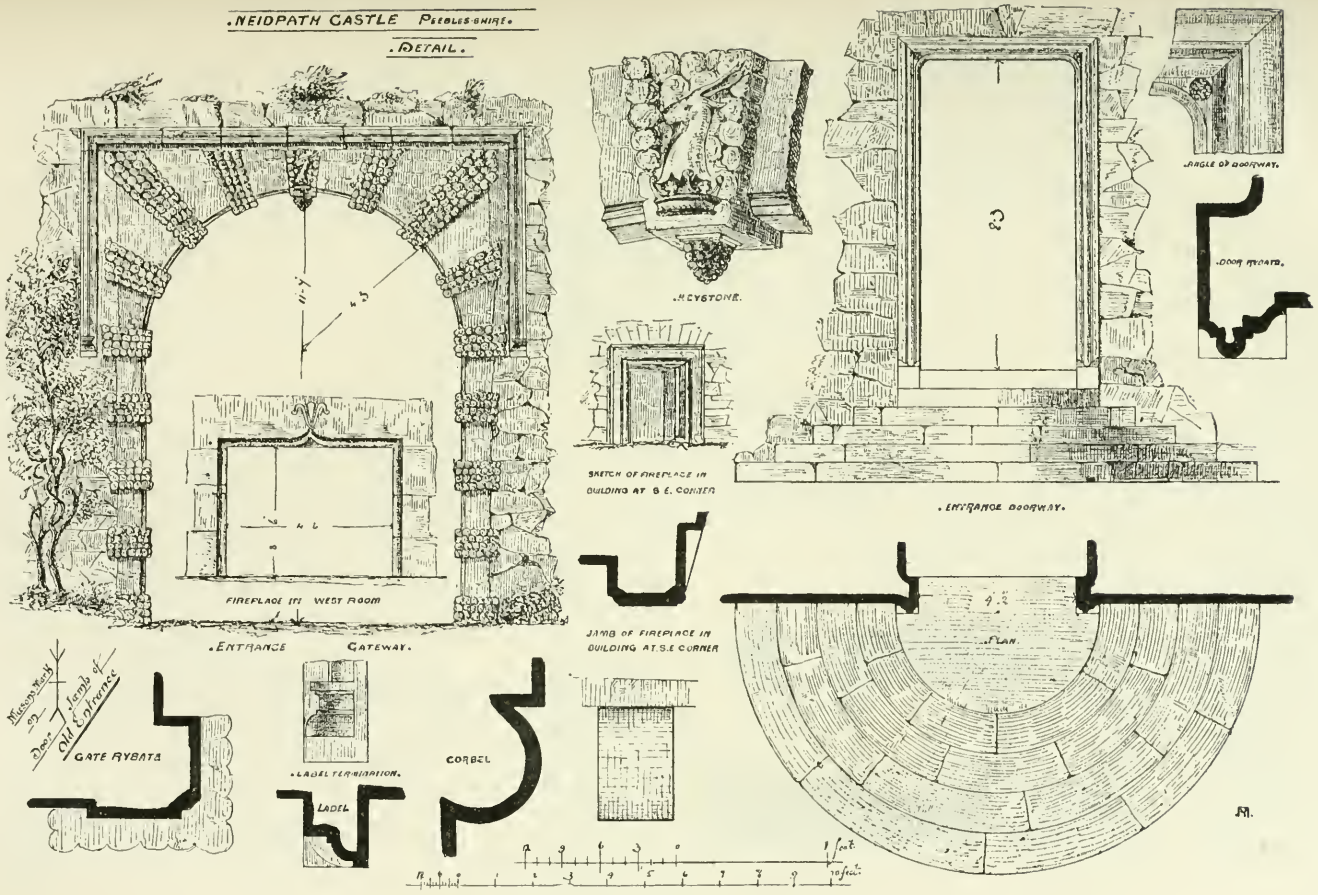
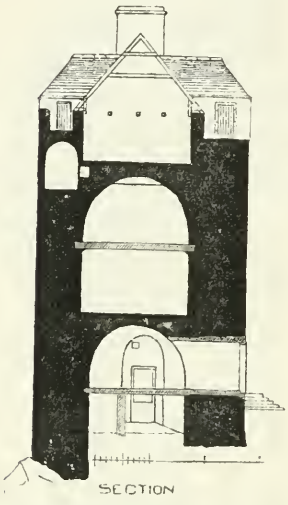


Fig. 151.—Neidpath Castle. Details.

great hall was on the second floor, immediately above the central vault, and was 40 feet in length by 21 feet 6 inches in breadth. The angles of the building are all rounded, and the parapet is also rounded like the angles, without projecting bartizans, in the same way as at Drum.



[Fig. 152.—Neidpath Castle. Section.

This tower was greatly altered in the seventeenth century, but is still interesting as showing how it was rendered available for the requirements of that period, without entirely losing its ancient character. A fore court is built in front of the east side (Figs. 149, 150) with a portion cut off to contain the offices, and the entrance is changed to the centre of this front. It is thus on the first floor, which is on the same level as the fore court. A wide square stair is introduced in one corner for access to the upper hall and private apartments. The top story is heightened, and the battlements are partly carried up so as to contain small apartments and give increased accommodation; the parapet fronting the courtyard, however, is left open, partly for defence and partly as a pleasant balcony or gallery.

Fig. 151 shows the details of the additions and alterations executed in the seventeenth century, with the crest of the Hays of Tweeddale (a goat's head) carved over the entrance gateway.

KEEPS EXTENDED INTO COURTYARDS.

Although some of the keeps above described have been greatly altered they still retain the original simple form of plan.

We shall now consider some fourteenth-century keeps which form the nucleus round which extensive castles have been built in later times. These extensions are generally made in such a manner as to convert the simple keep into a castle with buildings surrounding a courtyard.

The additions were almost invariably so designed as to include the old keep as an essential part of the new edifice. Hence it follows that it is scarcely possible to describe the old part of these castles without reference to their later condition. It has therefore been thought best to complete the description of each at once, although we thus have to deal with buildings of a much later date than those of the period immediately under consideration, of which the original keeps are the representatives.

CRAIGMILLAR CASTLE, Midlothian.

The castle of Craigmillar, near Edinburgh, contains one of the finest

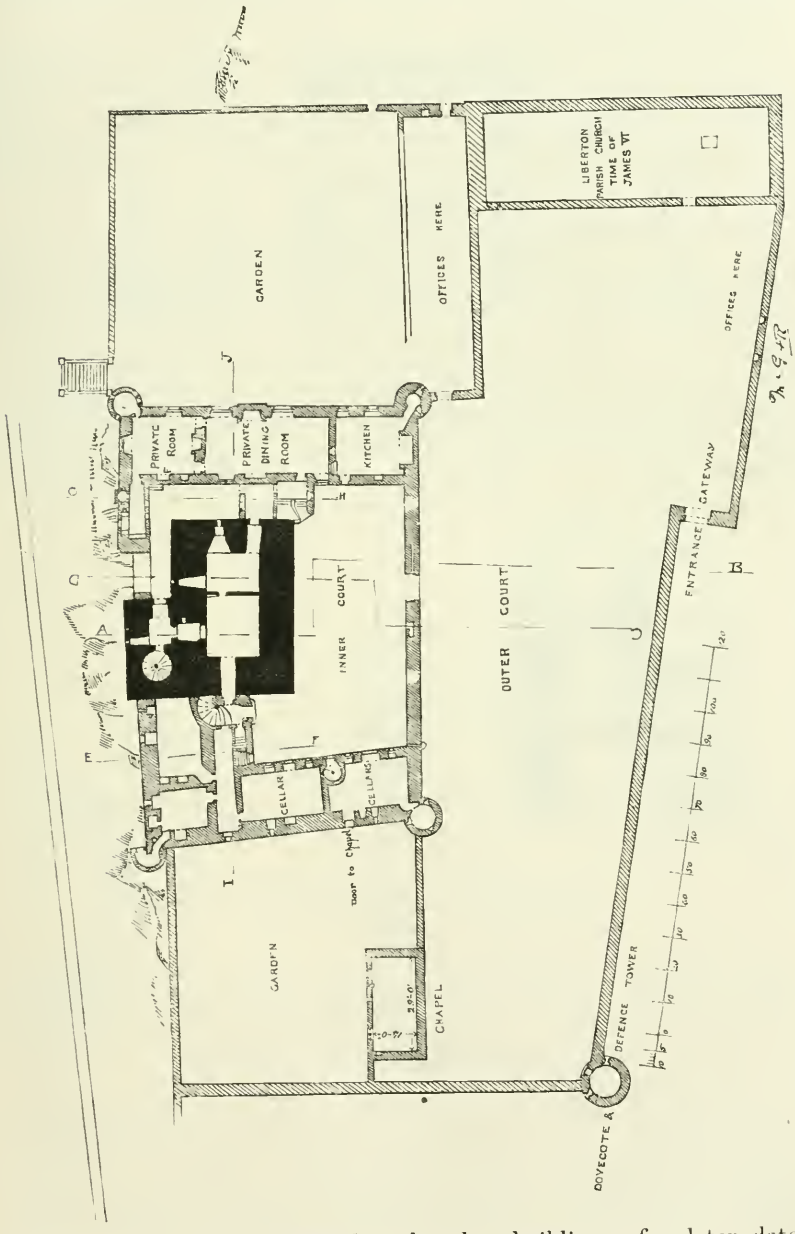


Fig. 153.—Craigmillar Castle. General Plan.

examples of the keep enlarged with other buildings of a later date.

This keep probably belongs to the latter part of the fourteenth century. The property of Craigmillar was purchased from Sir John de Capella by Sir Simon Preston in 1374, and the doorway of the keep is surmounted with the arms of the latter.

This castle was often occupied by Royalty in the time of the Stuarts, and was a favourite residence of Queen Mary. In 1543 it was taken by Hertford and much demolished and a great deal of it burned. In the seventeenth century it passed into the hands of the Gilmours, and is still the property of their successor, J. Little Gilmour, Esq., under whose care the fabric is kept in excellent repair.

Craigmillar was undoubtedly an important castle of the period, as we may see from the extent and strength of the enclosing walls of the inner courtyard, which were probably erected soon after the keep, and bear the date 1427. These walls (Fig. 153) enclose a space 130 feet by 90 feet, and are strengthened with round towers at the angles, while the keep is, as usual, situated on the enceinte, and on the most commanding position on the site, having a perpendicular rock 20 feet to 30 feet high on the south under the outer wall (Fig. 156). The general disposition of the plan thus reverts, although on a reduced scale, to the traditional arrangements of the great thirteenth-century castles.

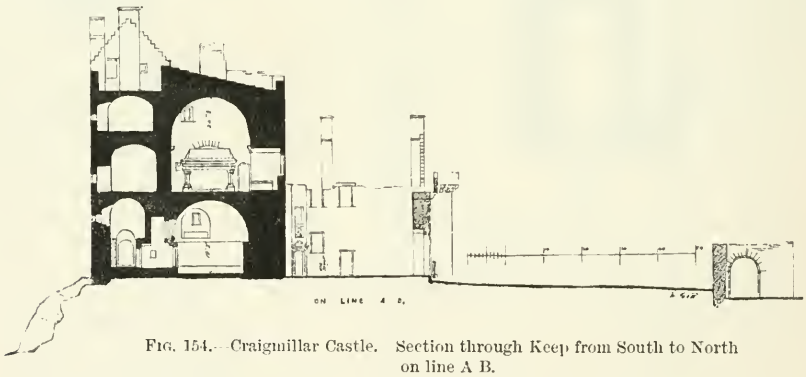


Fig. 154.—Craigmillar Castle. Section through Keep from South to North on line A B.

The plan of the keep is one of the usual forms above alluded to, having a projection at one side to supply private rooms, in addition to the hall. This form has the advantage of enabling the door situated in the re-entering angle to be well defended by flanking fire from loop-holes. The general plan of the keep corresponds with the usual description of similar buildings given above. The walls are 9 feet thick, with no openings on the ground floor except the door. The doorways shown on the plan in the east and west walls are late additions. The whole height is divided into two compartments with full centred vaults, further subdivided (Figs. 154, 155, and 156) with intermediate wooden

floors, as is apparent from the row of corbels for the beams of the ceiling

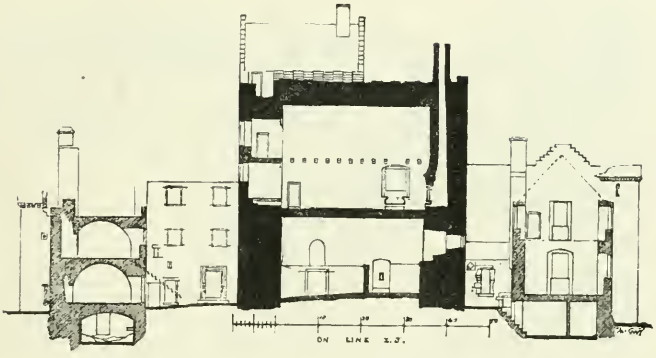


Fig. 155.—Craigmillar Castle. Section from East to West.

of the upper hall, and a scarcement in the lower hall, and also from doors and windows being placed at levels to suit the upper floors in the vaults.

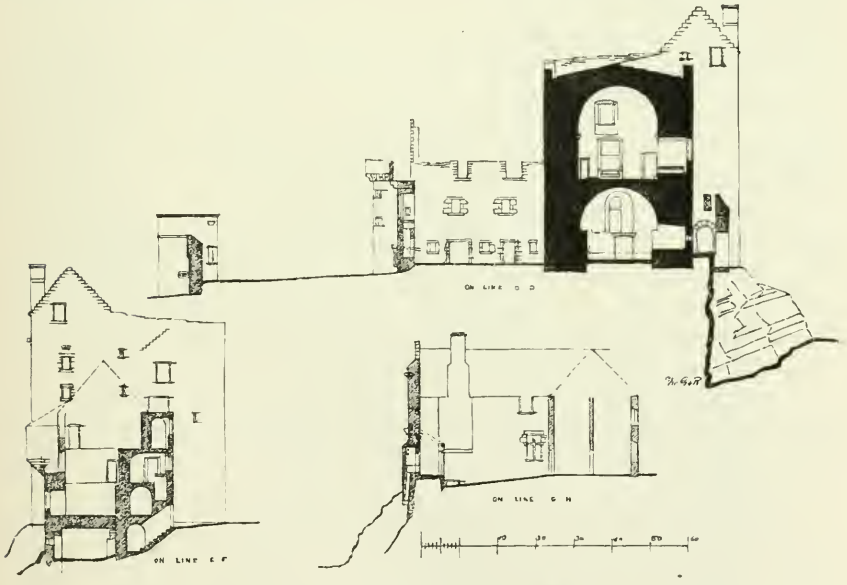


Fig. 156.—Craigmillar Castle. Sections.

The roof (Fig. 157) is flat, and is laid with dressed stone flags at such a gradient that it might all be occupied by soldiers and military engines for defence. The parapet (see Sections) is carried up flush with the face of the wall, without projecting corbels or string-course, but is provided with crenelations and plain gargoyles.

The entrance doorway is in the re-entering angle of the south wing. It has a circular arch, and is surmounted with a panel containing the

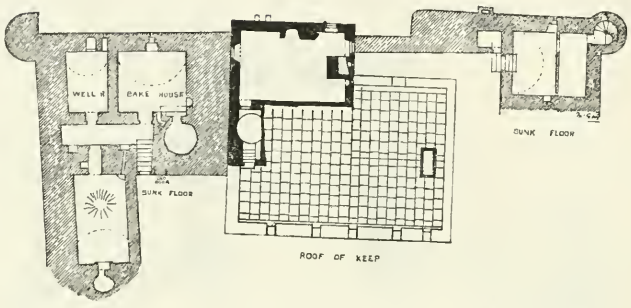


Fig. 157.—Craigmillar Castle. Plan of Roof of Keep and Basement of Wings.

Preston arms, boldly cut (Fig. 158). The position of the entrance doorway and lobby is carefully considered. To arrive at the door from the main gateway the visitor has to pass round at least two sides of the keep, and then along a narrow passage, well defended on all sides, and from above, by the keep and curtain. Besides, there is a chasm in the rock close in front of the doorway (Fig. 169), which had to be crossed by a moveable bridge before the door itself was reached. These strong defences of the doorway rendered it unnecessary, in this instance, to place the door, as was usually done, at some height above the ground. This doorway leads into a small entrance lobby about 3 feet below the level of the door-sill, which is commanded from the floor of a guard-room above (see Fig. 154). From this lobby there is a passage at right angles through the wall into the ground floor. This is defended by a door at the inner face of the wall, adjoining which the passage is heightened, so that it may be commanded from above by a door opening into it from the upper floor in the vault (see Section, 154).

As there is an inner door at the entrance to the stair to the upper floors, any one breaking into the outer lobby might stumble down the steps, or would at least be caught in a trap and pounded from above.

The stair is also carefully constructed with a view to defence. A newel stair runs from the inner door above referred to, to the level of the guard-room over the entrance (shown by dotted line, Fig. 159), where the stair is broken and a post formed for defence. A new stair, placed a few feet on one side, with a door at the entrance, runs from this point to the level of the principal hall, where another landing is provided, from which a separate stair leads to the upper floors and roof.

The great hall is 35 feet long by 20 feet 9 inches wide, and 25 feet

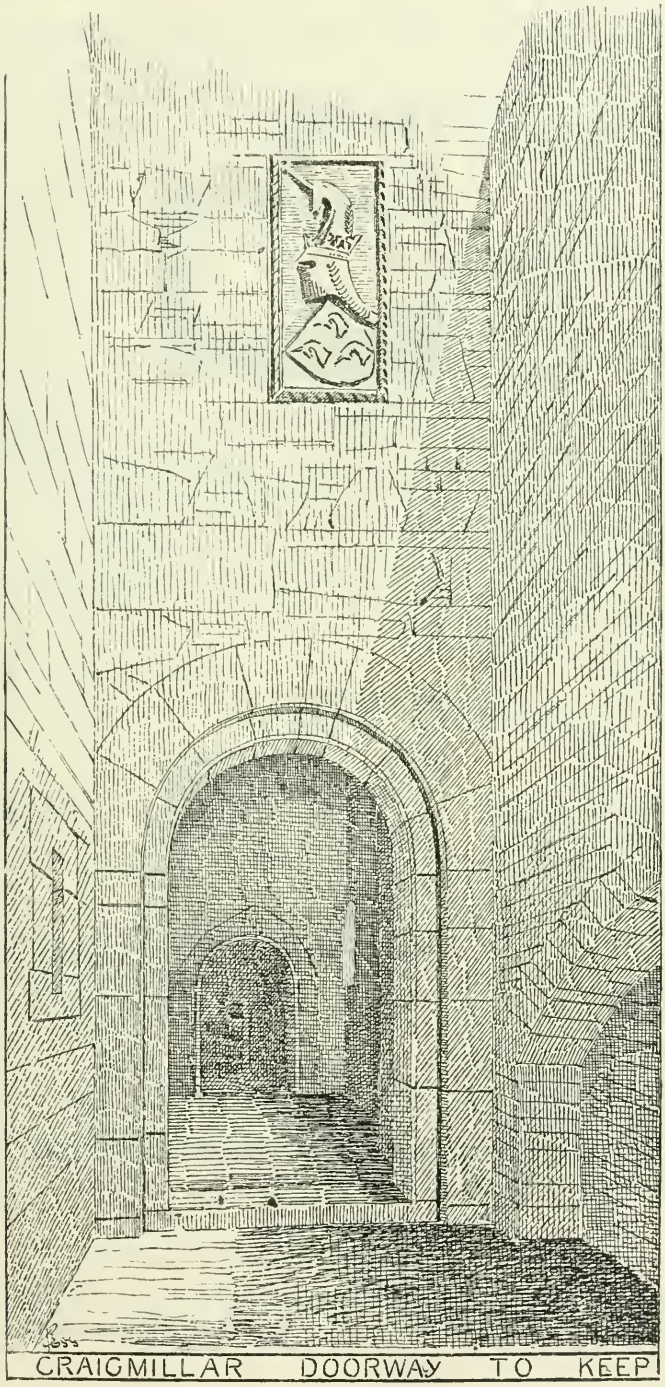


Fig. 158.—Craigmillar Castle. Entrance to Keep.

to the top of the vault. But the hall was only 12 feet high to the

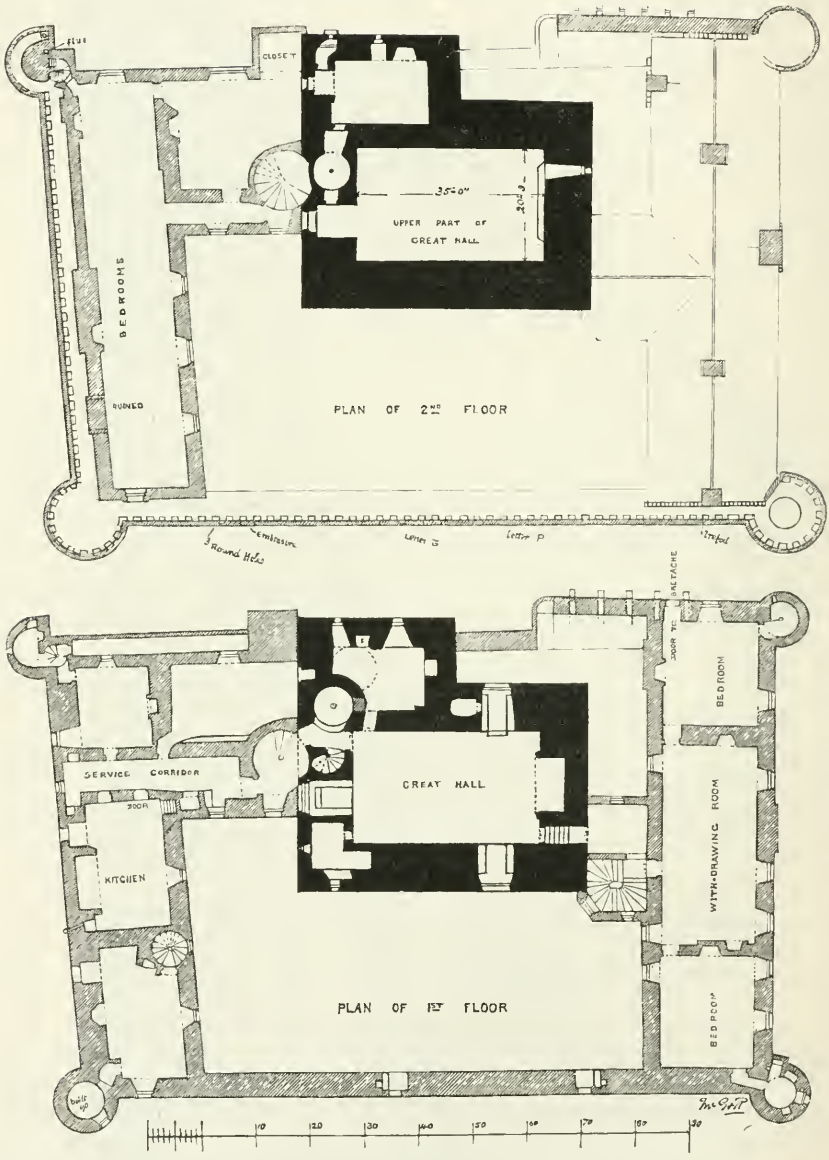


FIG. 159.—Craigmillar Castle. Plans of First and Second Floor.

wooden floor above at the level of the corbels (see Sections). This upper floor has a good entrance and window provided for it, besides a small

window in the west wall, such as is often introduced in these upper lofts, apparently more for air than light (see plan of second floor).

The hall has a fine fireplace (Fig. 160), with simple details; the windows at the upper end are large, and furnished with stone seats and lockers in the wall.

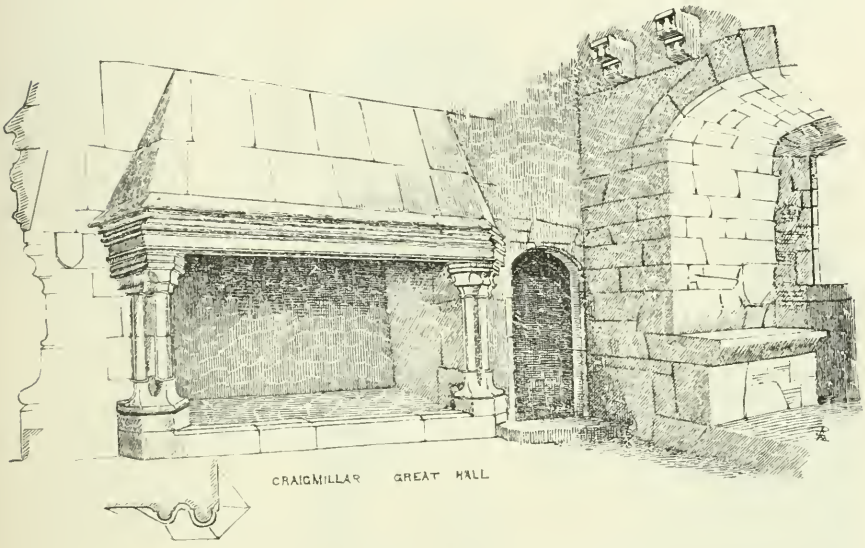
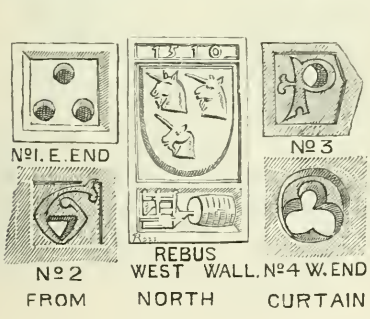
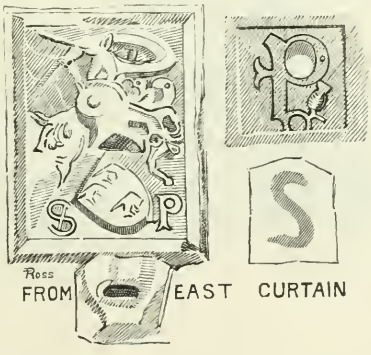


Fig. 160.—Craigmillar Castle. Fireplace in Hall.

In the south projection or wing, as already mentioned, there is a guard-room half-way up to the hall; there is a small room over this on the level of the hall, and a very agreeable room above it on about the





Figs. 161 and 162.—Craigmillar Castle. Details from Curtains.

same level as the upper floor of the hall (see Fig. 154). A similar room is also obtained on the level of the roof by carrying up the walls of the

south wing above the roof. This is rather an unusual arrangement, and has evidently been an addition, as some corbels still remaining indicate that the parapet has been originally carried round this part of the building (Fig. 163). It will be observed that the addition is placed on that side of the keep where defence from the parapet is almost unnecessary, from the protection afforded by the cliff below this point.

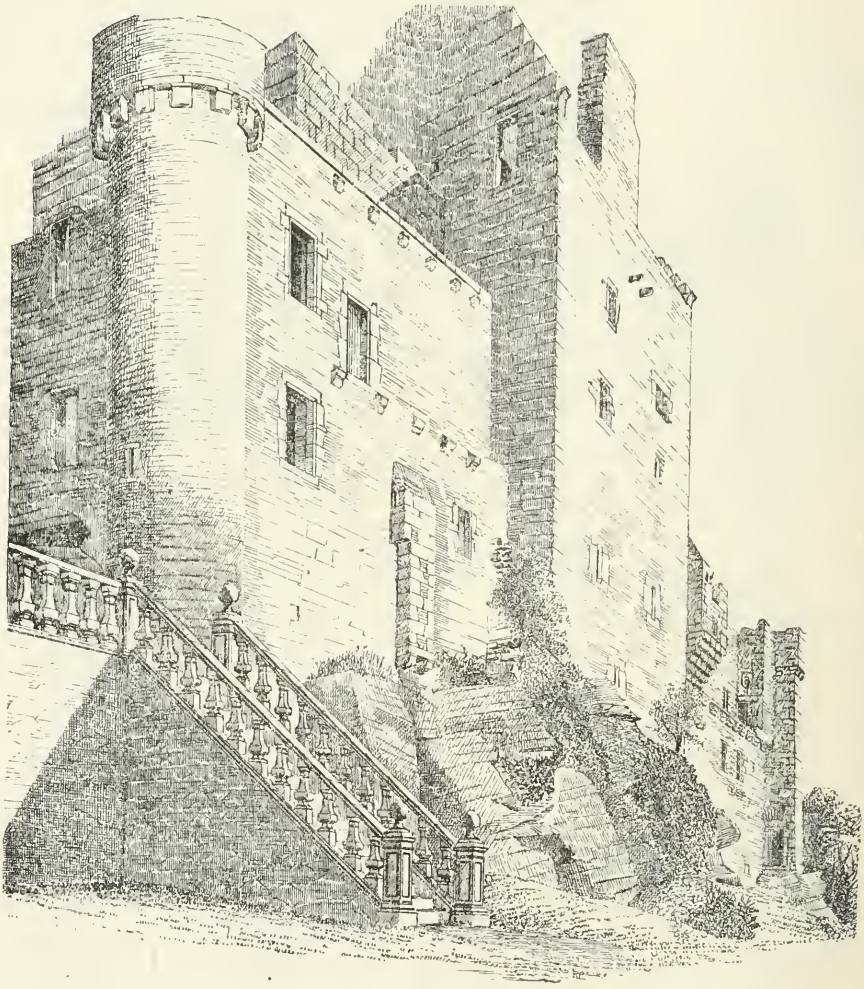


Fig. 163.—Craigmillar Castle. View of South Front (Balustrade restored).

The walls and towers of the enceinte are peculiarly interesting. The curtains are about 30 feet high, and are crowned with bold corbels and open machicolations, having a parapet provided with embrasures and

loopholes. Those of the front or north wall (Fig. 166) have the initial letters of Preston and Gorton, another estate of the family, carved on the merlons (or spaces between the embrasures), and loops are pierced through the letters (Figs. 161, 162). Some of the other arms and figures on various parts of the walls are also shown in Figs. 161, 162, including a rebus on the name of Preston, and a shield with the Preston arms and the initials of Simon Preston. Along the south front (Fig. 163), where there appear to have been early buildings against the inside of the walls, provision for defence has been made, at the east end by a stone parapet projecting on corbels, and a square turret (Fig. 165) very boldly corbelled out, while the high wall at the west end has been defended by wooden hoardings, the rows of corbels for carrying the floor and roof of which still remain, as distinctly seen in the sketch (Fig. 163). The outline of the door leading out to the hoarding is also visible, but has been built up when the later additions were made. This is rather an exceptional arrangement in Scotland, though common in France and England. The corner towers, of which there is one at each of the four angles, are carried higher than the curtains, and are provided with similar machicolated parapets. They also appear to have had an upper battlement above the existing parapet, a usual mode of defence in French and English castles (as at Pierrefonds and Cæsar's Tower, Warwick), but rare in Scotland. The stair leading up to this upper work still exists in the south-east tower. This tower is peculiar in plan, being circular to the east, but square to the west, thus forming a recess to mask the postern, which is situated in the angle (Fig. 164), and which gave access to the castle by a small winding staircase. The south-west angle tower, seen in the view of the south front, has been rebuilt at a late date. The gateway to the inner courtyard (Fig. 166) is rather a weak feature in this castle, as it now stands; but there are indications of there having originally been a guard-room and inner gateway, with probably a portcullis. That there have been buildings of some kind along the inside of this wall is apparent from the window and other recesses still remaining. One of these recesses on the upper floor contains a loophole and stone seat, as if for a sentry to watch the gate.

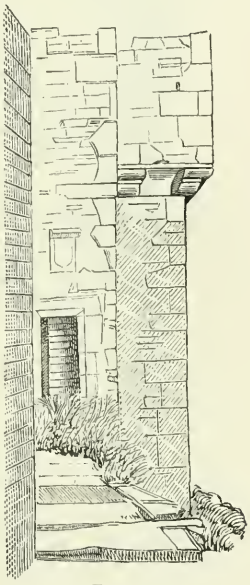


Fig. 164.

Towards the east end of this wall there is a stone trough, with drain and spout to the inside, similar to that at Bothwell. This has been for the supply of water from the outside, and no doubt there was a barrel or

tank of some kind inside the wall to receive it. Such an arrangement is very common in later castles and houses, where the supply-trough and spout are generally situated in or near the kitchen.

It is an interesting and somewhat rare circumstance to find here the outer court and some of the outer walls and defences still existing, as also some of the farm-buildings and the chapel, which were situated in the outer bailey.

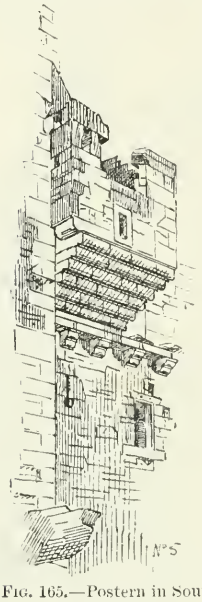


Fig. 165.—Postern in South-East Tower.

The approach to the castle is carried for a considerable distance close under the wall of the outer courtyard, which commanded it from the parapet, and past the north-east corner tower, which was partly used for defence and partly as a dovecot (see Figs. 153, 166).

The entrance gate to the outer bailey, with a post for the guard, faced this approach. The stables and farm-buildings were no doubt to the west of this. The barn, which still exists, is of great size, and is said to have been used as the parish church during the contests between the Episcopalians and Presbyterians in the seventeenth century.

The chapel (Fig. 167) is a very simple building, the few remains of carving about it indicating fifteenth-century work. It is so placed as to be accessible both from the castle and the outer bailey.

When the keep began to be found too confined, and larger accommodation was required, it is probable that some buildings were added against the west wall of enceinte. There are evidences of the buildings here having been pretty old, and it is clear from the work traceable on the outer walls that the last alterations at this place (which belong to the seventeenth century) have superseded previous buildings, the walls of which were then heightened and altered.

The greatest additions, however, which have been made to Craigmillar no doubt belong to the sixteenth century, when the castle was restored after the ravages caused by Hertford. These consist of the whole range extending along the east wall and round the south wall till it joins the keep. It was at this period that the arrangements of the plan were so completely altered as to take this castle out of the category of the keeps, and bring it into that of the castles with quadrangles.

Although these additions are, as above indicated, of a much later period than the original castle, still they are, as we shall presently see, of a similar character to those of castles built in the early part of the fifteenth century, *i.e.* on the plan of a courtyard; and it will be more

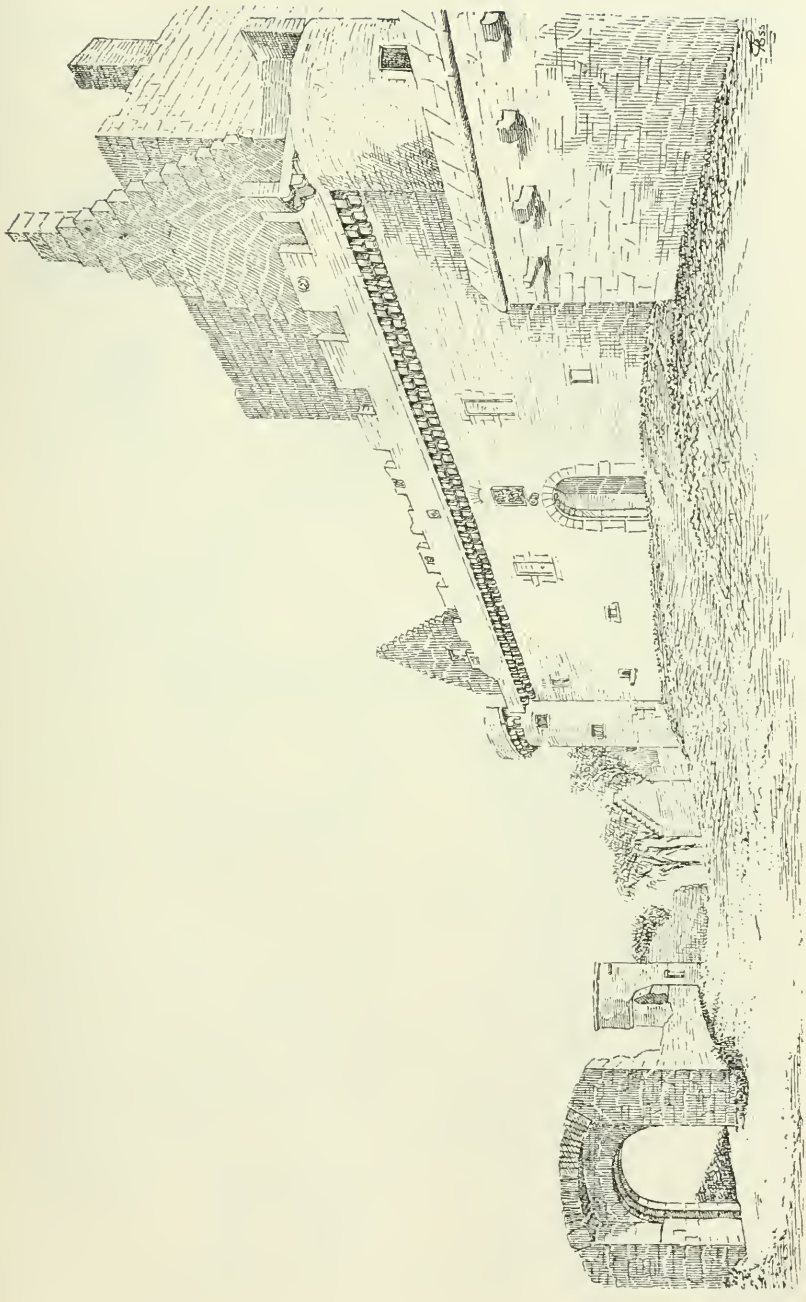


Fig. 166.—Craigmillar Castle. View of North Front.

convenient to describe them now than later. The same remark will apply to the description of the additions made to several other castles of

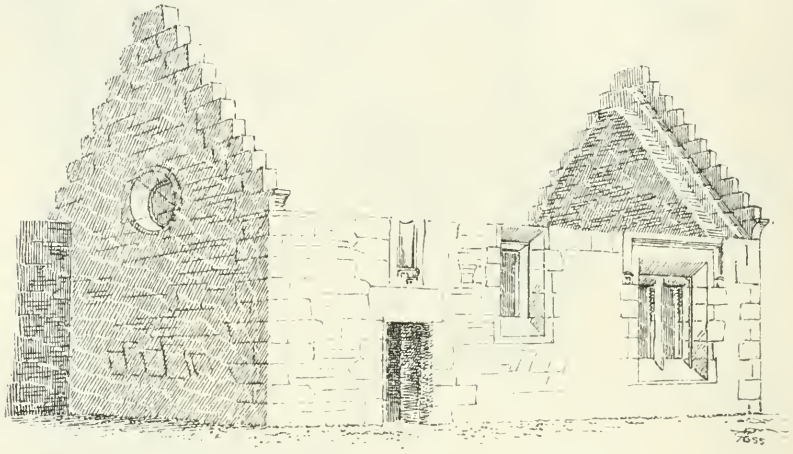


Fig. 167.—Craigmillar Castle. Chapel from the South-West.

this period. The keep still remains as a central stronghold; but the access to it is improved by the introduction of a wide and easy spiral staircase, with an early Renaissance doorway of sixteenth-century work (Fig. 168). On the basement of the additions there are, as usual, cellars —one containing a draw-well, another a bakehouse with oven, and other offices. A separate stair branches off, at the entrance door, to the kitchen and its offices on the first floor. Each floor in this department is vaulted (see Fig. 155). A corridor on the first floor has a service window from the kitchen, with easy communication with the great hall. This corridor also gives access to rooms on the south side. On the second floor there is a similar corridor communicating with a series of bedrooms on that floor. This wing was probably set apart for guests and strangers. We usually find an arrangement of this kind in these large castles.

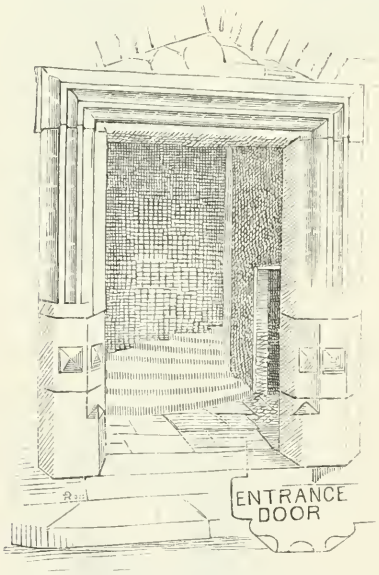


Fig. 168.—Craigmillar Castle.
Entrance Doorway to Western Wing.

The west wing, as it now stands, is seventeenth-century work, but the present buildings supersede older ones, which have been altered, but

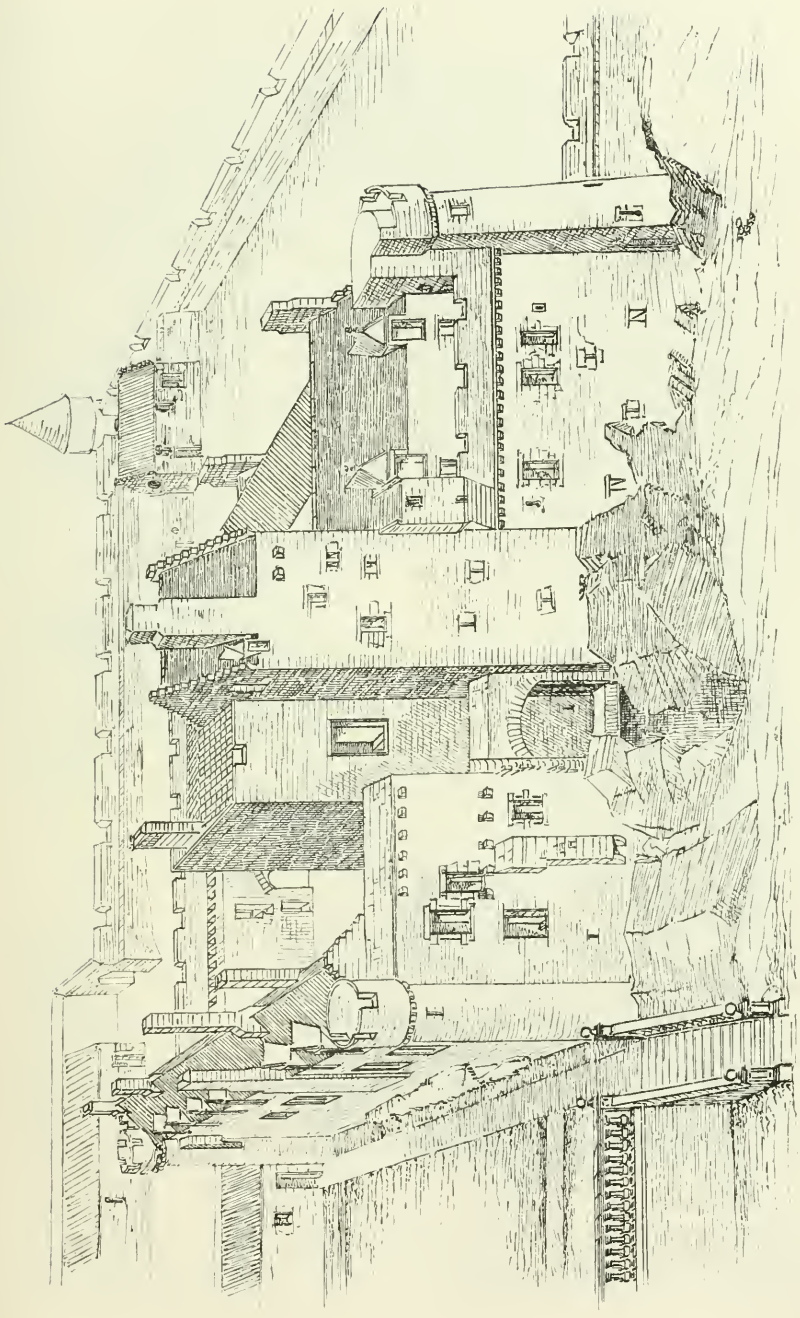


FIG. 196.—Craigmillar Castle. General View from South, slightly restored.

of which some features are still traceable. Thus (section G H, Fig. 156) we find a fifteenth-century window, with mullions and transom now built up, and other details. This wing contained the private or family apartments, with separate staircase and a separate access to the great hall. Here the dining-hall is on the ground floor, with a kitchen at the north end and a private room at the south end, with wine-cellar beneath, and private stair leading down to it. This reminds us of the arrangement of the English halls. The plan of having a private access to the wine-cellar is quite usual in Scotch castles. The upper floor contained private or family bedrooms.

These seventeenth-century buildings show that manners and customs had then greatly altered. It was no longer the habit of the proprietor and his family to dine in the hall with his retainers. He preferred to have a distinct suite of public as well as private apartments for his own use. The same thing occurred in England, and was regarded as a luxurious and effeminate custom, which was to be discouraged, and orders were published prohibiting dining apart from the people in the hall; but like ordinances against the wearing of certain clothes and other fashions, with small effect. As at Borthwick, some remains are still visible of the painted decorations of the hall, as shown on the corbels, etc. (Fig. 160).

Fig. 169 gives a general view of the castle as seen from the south, with slight restorations, chiefly the replacing of the roof. The staircase at the west end leading down to the base of the rock is now a heap of ruins, but the pedestals shown at top and bottom still exist as gate-posts at the adjoining farm-house. These show that there was a balustrade similar to that indicated on the sketch.

CASTLE CAMPBELL, Clackmannanshire.

Castle Campbell is another castle which had its origin as a simple keep, and was afterwards extended into a large castle, with buildings round a courtyard or quadrangle. The situation of this castle is magnificent (Fig. 170). It stands on a lofty isolated point near Dollar, commanding an opening in the Ochil Hills, with an extensive view over the valley of the Forth. The castle is approached through dark-wooded ravines, surrounded with perpendicular rocks, which give it a grand and impressive effect, besides rendering the position almost unassailable with the engines in use at the time. This castle was originally called the Castle of Gloume; but the name being disliked by the first Earl of Argyll, the then proprietor, he obtained an Act of Parliament in 1489 for having it changed to its present designation. The castle was destroyed by Montrose in 1645.

The keep, and some portions of the walls of the enceinte, are very

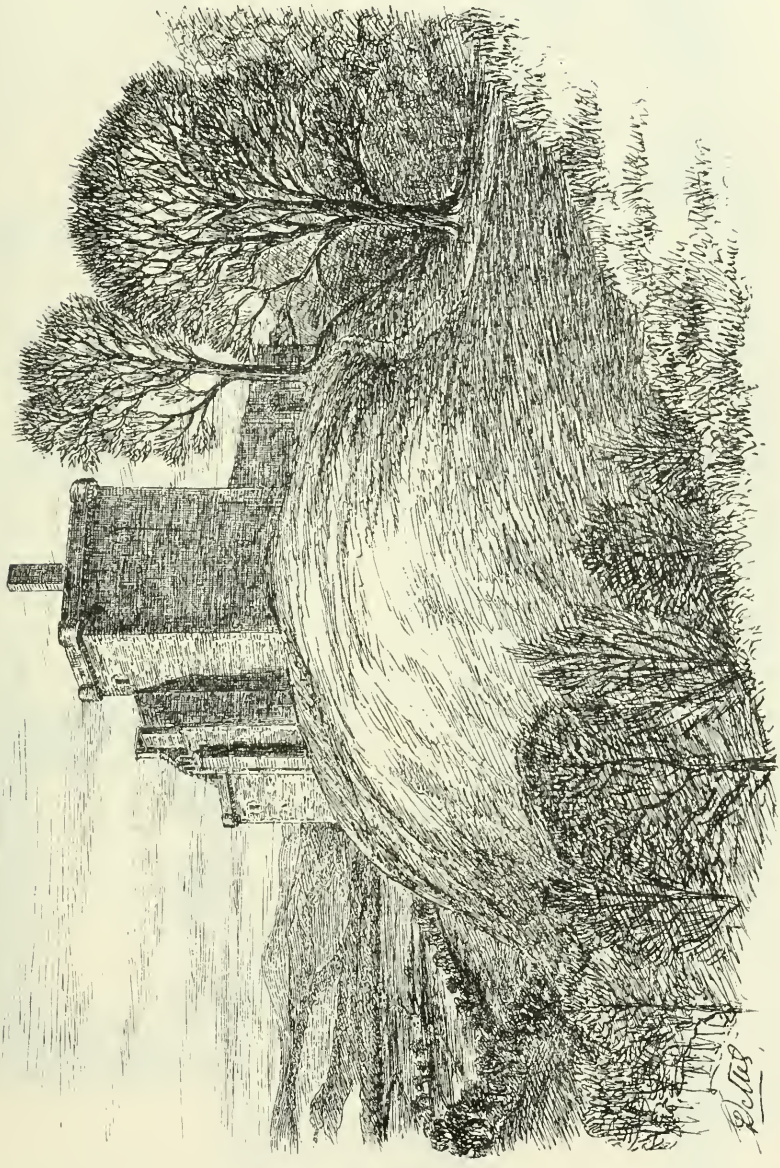


Fig. 170.—Castle Campbell. View from the North-East.

similar to those of Craigmillar. In this case the original keep (Fig. 171) is a simple parallelogram in plan. The walls are 7 feet 6 inches thick, and the hall is 28 feet long by 16 feet wide. The entrance door is on

the ground level, and a straight stair in the thickness of the wall leads to the first floor, from which another stair in the *opposite corner* of the hall (Fig. 172) leads to the upper floors and the roof. The keep is four stories in height, and three of these are vaulted (Fig. 173) with barrel vaults, viz., the ground floor, the first floor, and the top story—the two upper stories being divided with a wooden floor resting on corbels, which still remain.

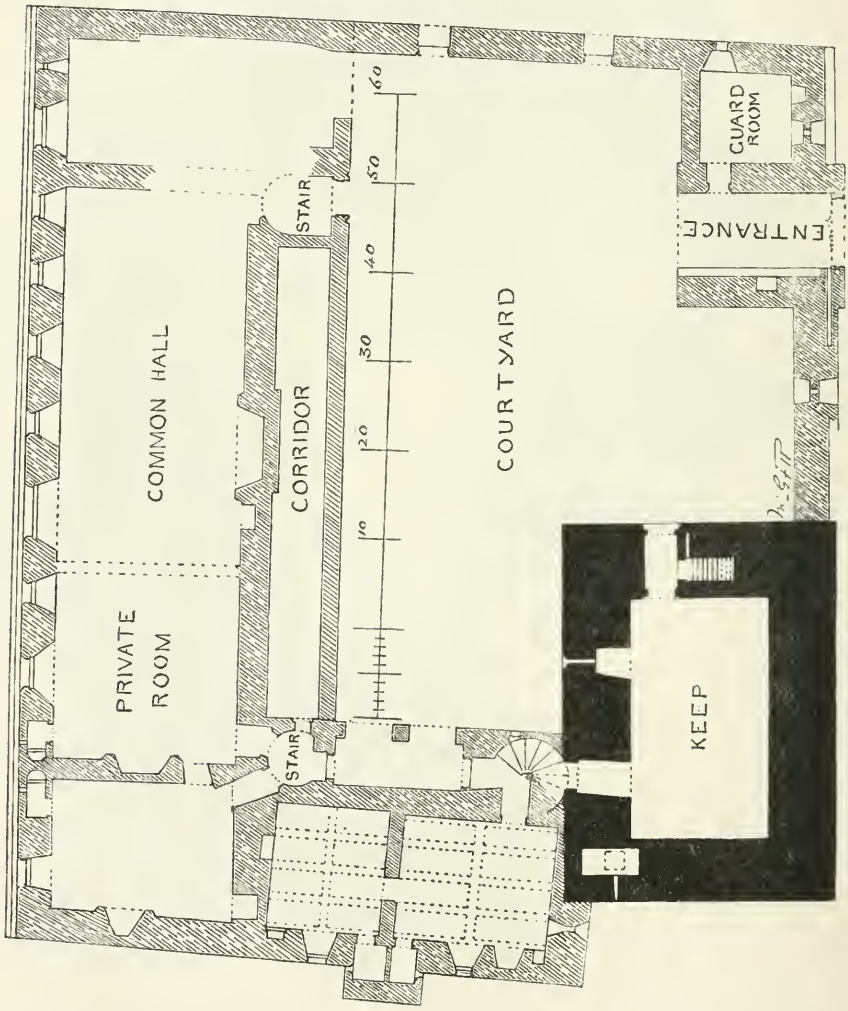


FIG. 171.—Castle Campbell. Plan of Ground Floor.

There do not appear to have been any lofts or upper floors in the vaults of the two lower floors, which are not high enough to admit of

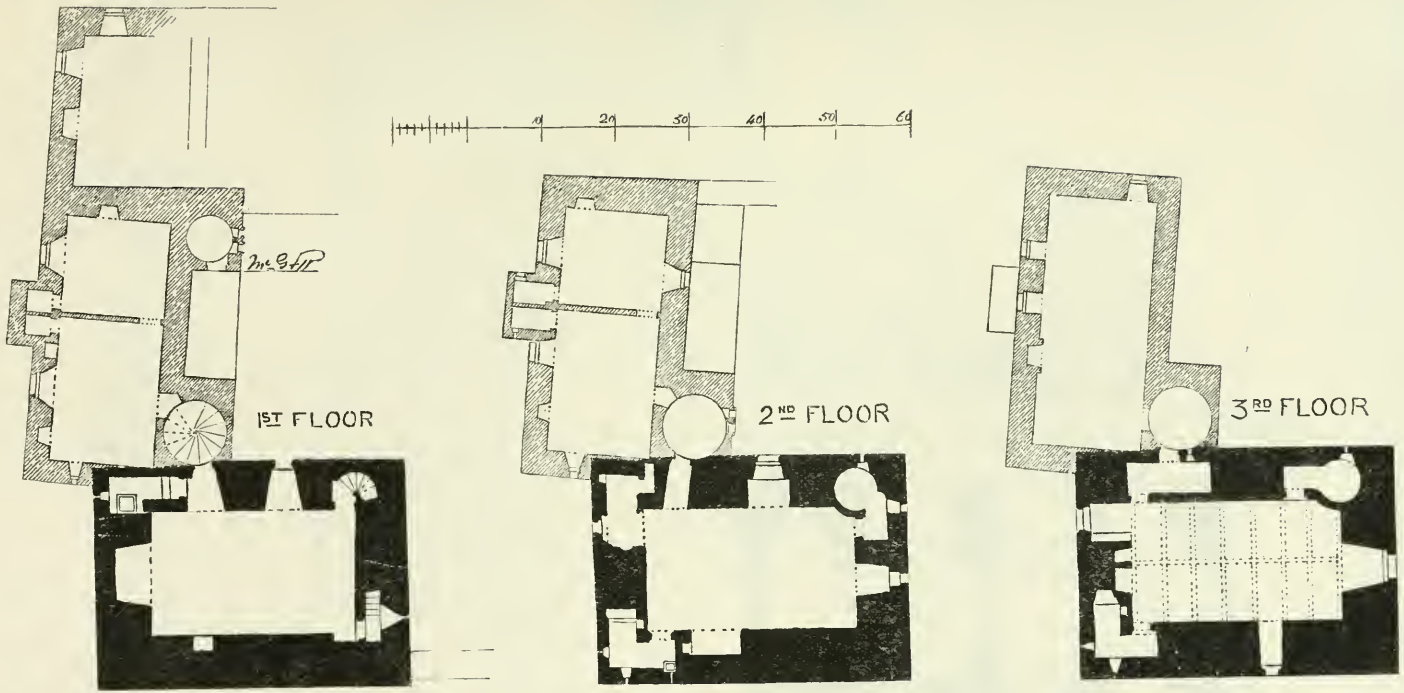


FIG. 172.—Castle Campbell. Plan of Upper Floors.

them; and the position of the windows, which are carried well up into the vaults, shows that this was not intended.

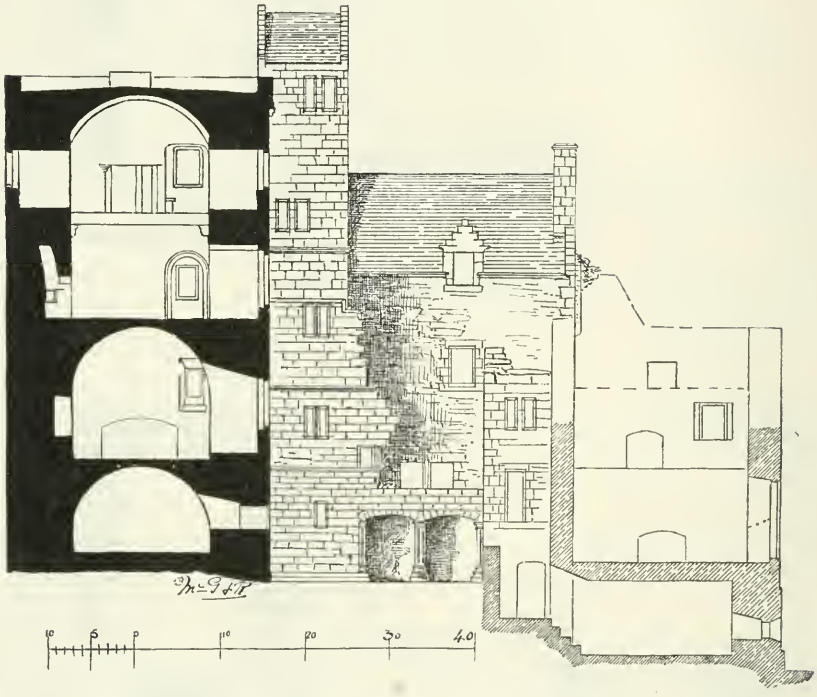


Fig. 173.—Castle Campbell. Section looking East.

The ground floor has an inner door for protection, and very small loops for light. There is also here a specimen of the kind of accommodation provided for prisoners in those days. A pit, 6 feet 6 inches by 3 feet, is formed in the thickness of the wall at the south-east angle, and is entered from a trap in the ceiling opening from the floor of the wall chamber adjoining the fireplace of the hall above. The windows become larger and the rooms more cheerful as they ascend. There are the usual small chambers and recesses in the walls for garde-robes, etc. The first floor is the common hall, and the second and third floors are the private rooms of the lord and his family. Originally the vaulting of the top story has been intended to carry the stone roof, with which the keep was no doubt covered. This vault is ornamented with ribs and masks, similar to those of some of the apartments of the extended buildings, which are of later date than the keep, and is clearly a restoration of that time. The ribs of the keep and the additions are shown by dotted lines on the plans of the third floor and ground floor. The

exterior of the keep (Fig. 174) is, as usual, perfectly plain. The parapet rests on a corbel course, without machicolations, and has rounded bartizans at the angles with carved gargoyles.

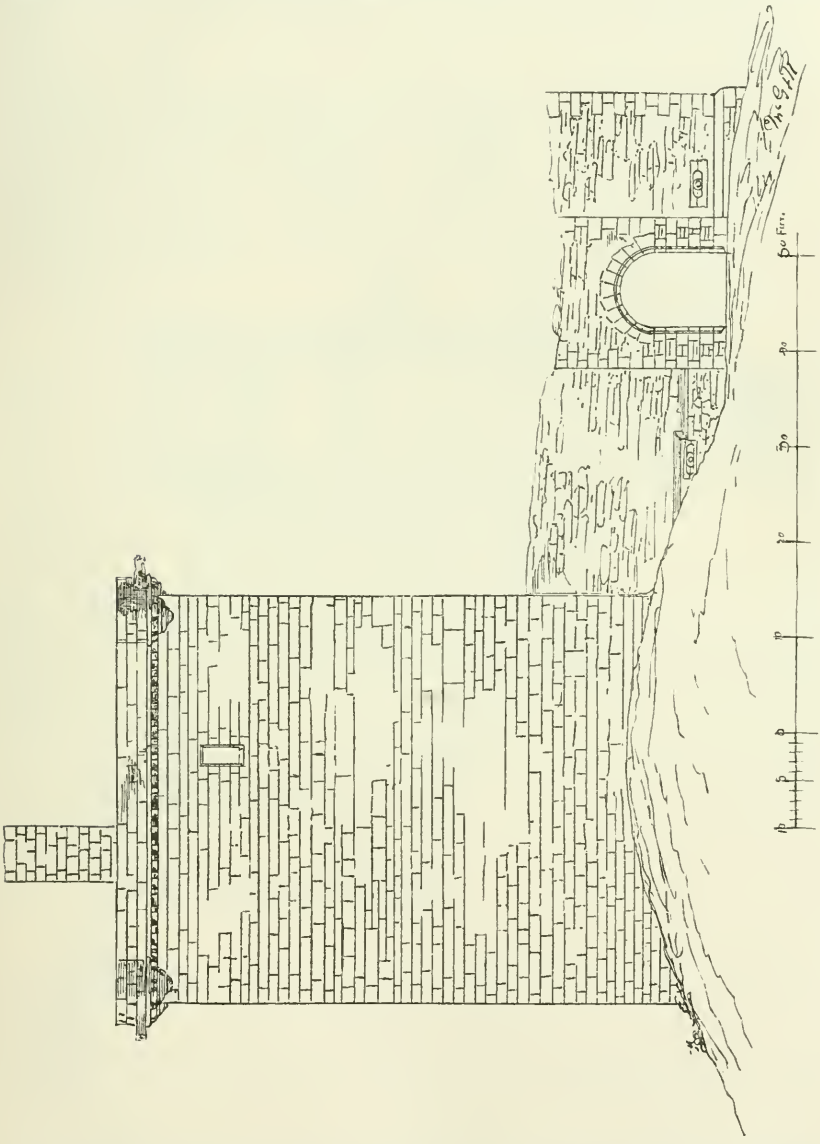


Fig. 174.—Castle Campbell. North Elevation of Keep.

The walls of the enceinte (Fig. 175), so far as original, are provided with corbels and machicolations similar to those of Craigmillar, but here also the curtains have been used for the extension of buildings round the

courtyard. Along the south side (see Fig. 171) there is a fine suite of apartments over vaulted cellars (Fig. 176) on the basement floor, comprising a great hall 42 feet by 20 feet, with a porch and staircase at the

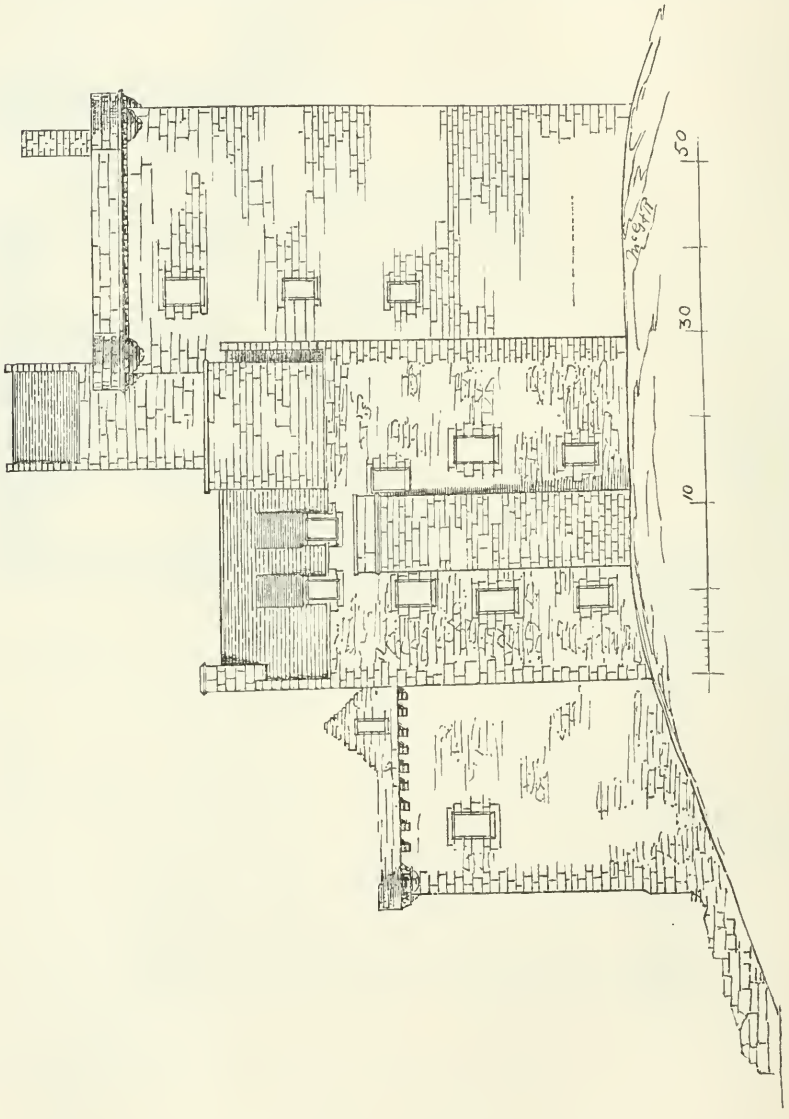


Fig. 175.—Castle Campbell. Elevation of East Side.

west end, entering from the courtyard, and a large window and fireplace on opposite sides at the upper end. The hall communicates at the east end with the private parlour or lord's room beyond, to the east of which

is a large bedroom. Some time ago the floor of this range of buildings was excavated and examined by Mr. Miller, C.E., Edinburgh, when he found a quantity of fragments of the stained glass with which the windows were glazed. The kitchen and offices were probably at the west end of the hall. The entrance portico of the extended buildings is unusually fine (Fig. 173), and is so placed as to communicate by means of corridors and stairs with the old keep and other apartments on the one hand, and with the hall and public rooms on the other hand. The former were probably the family apartments, and are approached by a wide circular newel stair. The guests' apartments were probably over the hall and south wing, and had two separate entrances and staircases, one in connection with the entrance portico and the other at the west end.

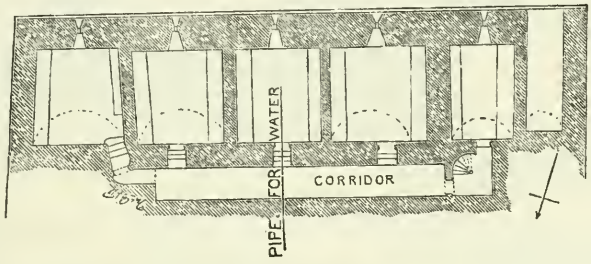


Fig. 176.—Castle Campbell. Plan of Basement of South Side.

It should be observed that the staircases and apartments of this wing are joined by a corridor or passage. This is a very unusual arrangement, the houses of this period being almost invariably "single tenements" with windows on both sides.

The gateway and gatehouse of Castle Campbell (Fig. 174) are interesting and well-preserved features.

The horizontal loopholes for fire-arms show that they are of late date.

CRICHTON CASTLE, Midlothian.

Crichton Castle in Midlothian is a splendid specimen of a castle which had its origin in a simple fourteenth-century keep, and became extended in after-times into a castle surrounding a courtyard.

There is no record of the building of the keep, but about the middle of the fifteenth century this castle belonged to Sir William Crichtoun, who was Chancellor under James I., and afterwards guardian of James II. In 1445 Crichton was stormed and dismantled by Forrester of Corstorphine, one of the Livingston faction. In 1488 the castle and lands were granted to Patrick Hepburn, first Earl of Bothwell. James VI. bestowed them in 1576 on his favourite, Francis Stewart, fifth Earl of Bothwell.

They have since passed through many hands, and are now the property of W. Burn Callendar, Esq.

The castle is situated on a platform near the top of a steep upland hill, which rises from the valley of the Tyne, in Midlothian, near its source, and not far from Borthwick Castle.

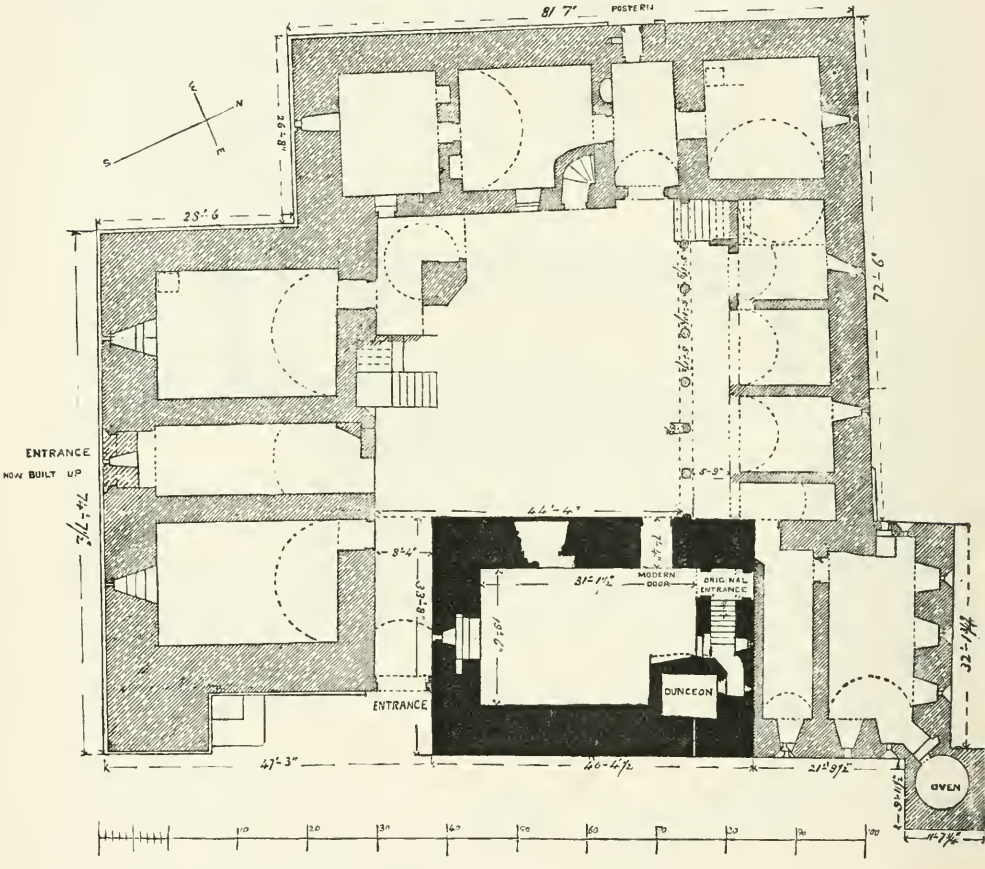


Fig. 177.—Crichton Castle. Plan of Ground Floor.

Simple as the fourteenth-century keeps are, they have almost all some peculiarity of plan, as will be seen is the case here. At Crichton the keep (shaded black in Fig. 177) is of the usual oblong form, being 46 feet 6 inches long by 33 feet 8 inches broad. The walls are 7 feet 4 inches thick. It is partly ruined, but still retains portions of two plain barrel vaults (Fig. 178), one of which, at the level of the hall floor, is semicircular, and encloses the usual two basement stories, and the other, which is slightly pointed, forms the roof of the hall.

The original entrance to the ground floor was from the north, whence

a straight stair led, in the thickness of the north wall, to the upper floor in the vault of the basement. This staircase also conducted to the door

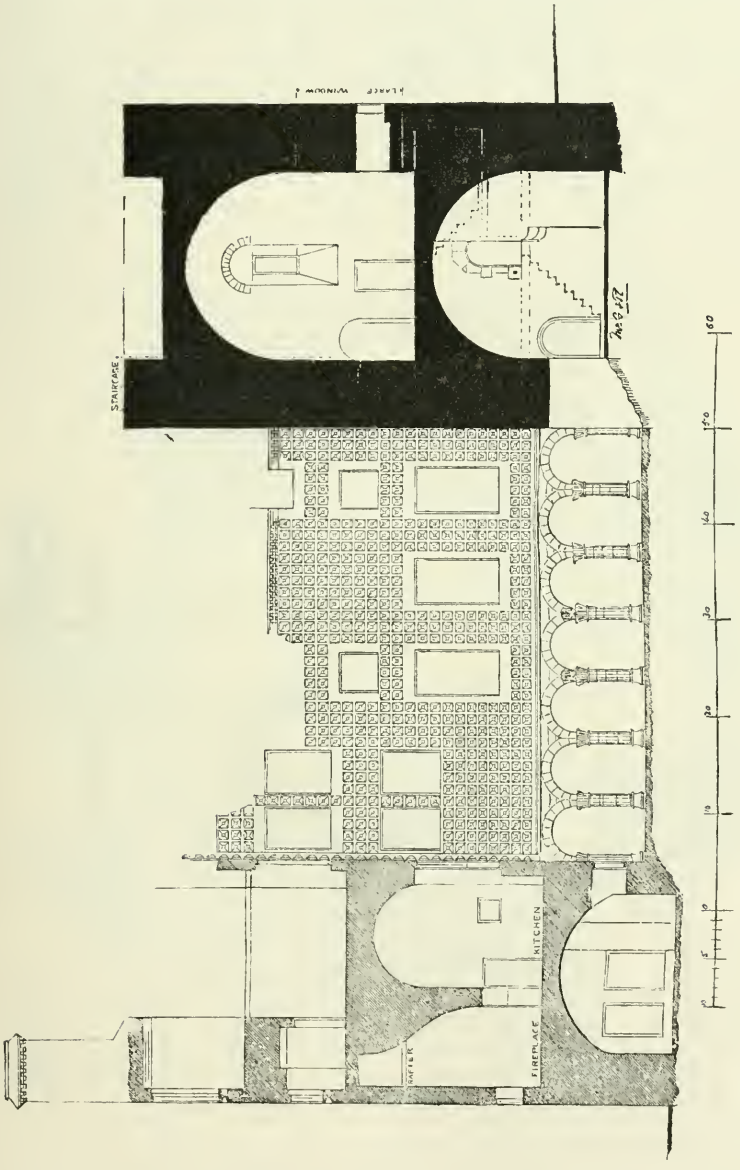


FIG. 178.—Crichton Castle. Section through Courtyard and Keep, looking North.

of the dungeon in the north-east corner of the keep, which is about 8 feet long by 6 feet wide. The door, which is only about 30 inches high, is

about 9 feet above the floor. There is the usual narrow slit for air through the outer wall.

The only entrance to the hall (Fig. 179) was by an outer door at the level of the floor, above the door to the basement, there being no internal communication from the basement to the upper floors. The hall is 33 feet 6 inches long, by 19 feet 8 inches wide, and 23 feet 9 inches high to the top of its pointed vault. This height has not been divided by any intermediate floor, but has been all included in the hall. This is apparent from the position of the large windows, which go well up into the vault, and from the sloping sill of the upper window in the north gable (Fig. 178).

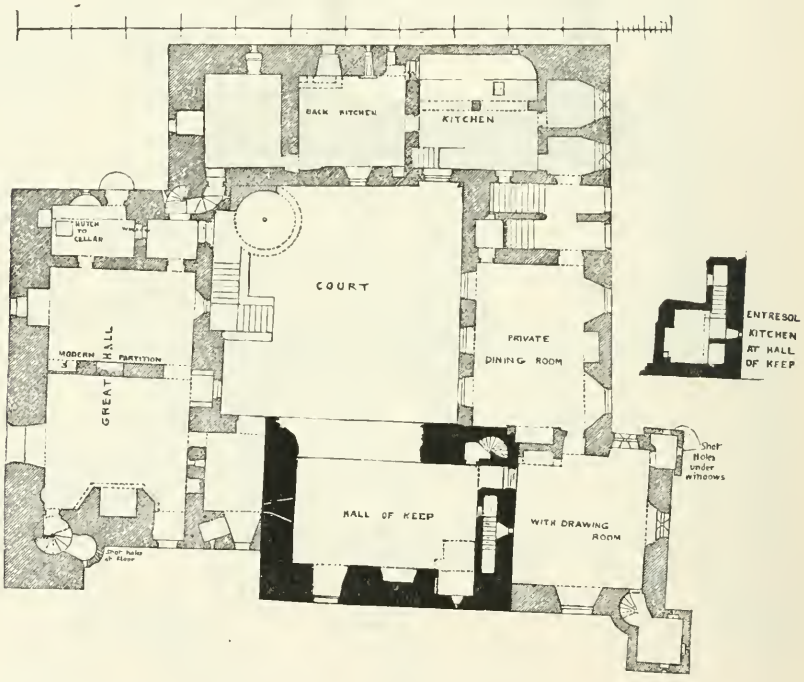


Fig. 179.—Crichton Castle. Plan of First Floor.

The arrangement of the kitchen of the keep (Fig. 179) is very peculiar, being an entresol formed in the haunch of the vault of the basement floor immediately above the dungeon. It is entered only by a stair going down from the north end of the hall, where, by borrowing part of the thickness of the outer wall, a space of about 12 feet by 7, with a fireplace, is obtained.

Adjoining the entrance door a newel stair leads to the upper floor and the roof. There appear to have been the usual private rooms above the hall. These were probably vaulted, with a stone roof resting on the

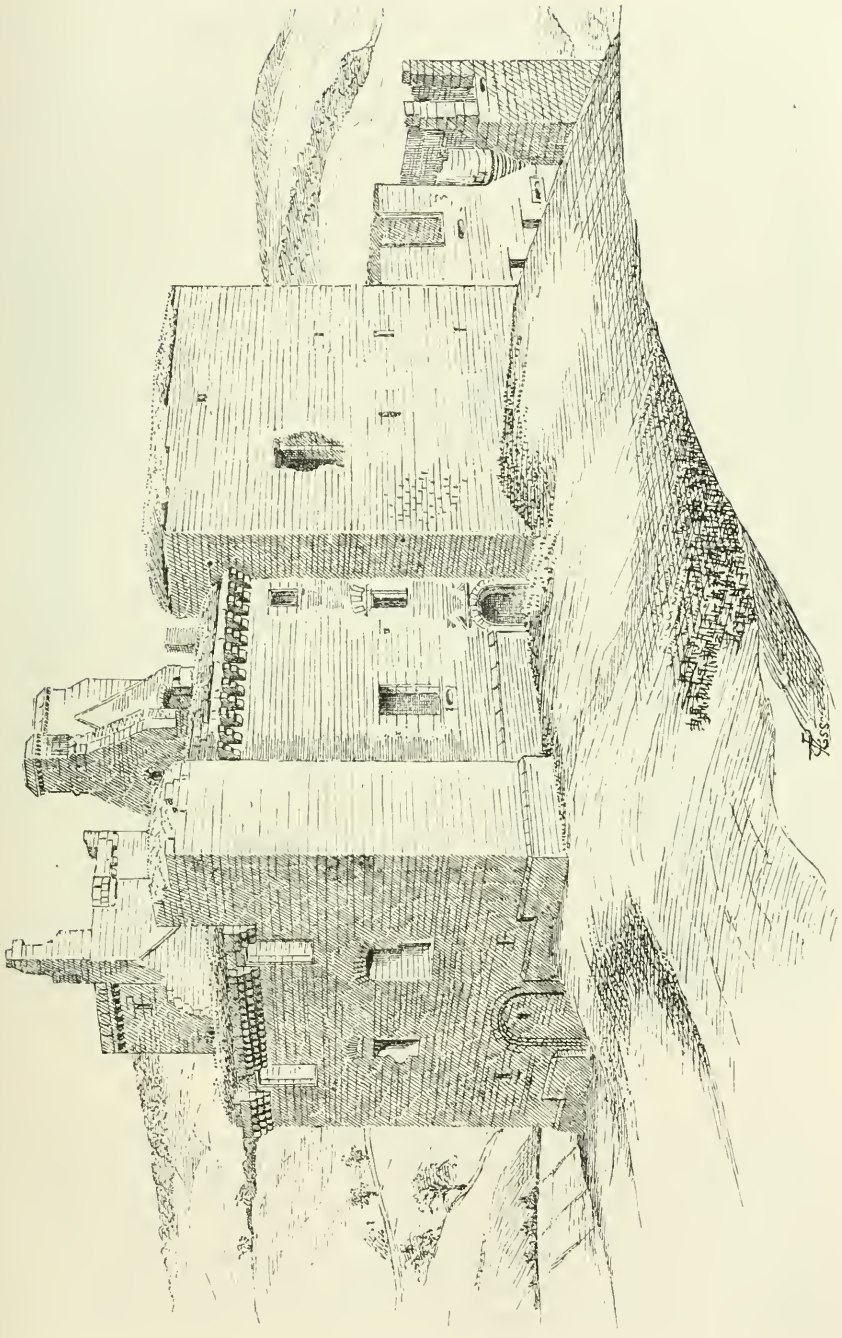


FIG. 180.—Crichton Castle. View from the South-East.

vault, and battlements all round; but the whole top story has now disappeared.

The first extensions of the buildings were on the south and west sides of the courtyard, where probably the enclosing wall formerly stood. The southern side contained the new halls, and the western side the kitchens, etc. These buildings date from the fifteenth century, and were probably erected by the Chancellor. They correspond with the arrangements of other great castles of that period, such as Doune and Tantallon. Thus the entrance was by an archway under the hall, as at Doune, and the halls on the upper floors are of great dimensions. The external character of the work, with its bold corbels and machicolations, also corresponds with that of the above castles (Fig. 180). There were two entrances under the new buildings, one from the east and the other from the south (Figs. 177, 180), but the latter was subsequently built up, probably because the levels of the ground were found to suit best

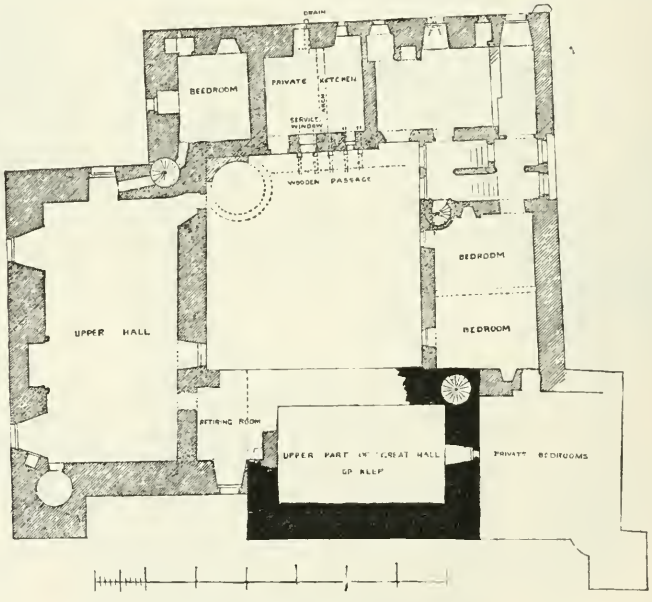


Fig. 181.—Crichton Castle. Plan of Second Floor.

for the eastern entrance. The basement is as usual occupied with vaulted cellars. Above this, on the south side, there are two halls, one over the other. That on the first floor was approached by a wide outside stair, and has an inner lobby and service room with a hatch to the cellar at the west end. A rather remarkable circular balcony projects from the window of the service room (see Billings), the use of which it is difficult to define. The lobby and service room are separated from the

hall by a stone partition, which occupies the usual position of the "screens."

The hall is 44 feet long by 26 feet 8 inches broad. The fireplace is enriched with carving similar to that at Borthwick, and the outer and inner doors are also carved and shaped in the style of the fifteenth century.

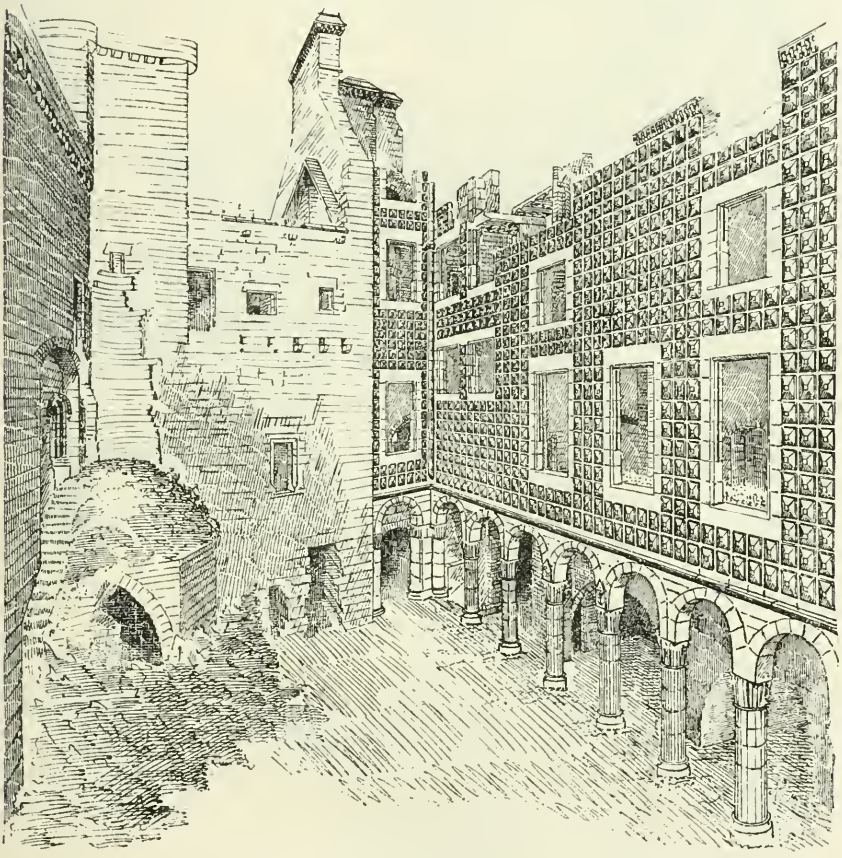


Fig. 182.—Crichton Castle. View in Courtyard.

Above this hall, at a height of 14 feet, is another hall (Fig. 181) of the same dimensions, which would usually be regarded as the withdrawing-room, but would appear (as we shall afterwards see) to have been also used as a private dining-room. It has a stone cornice carved with flowers and ball ornaments, and a handsome fireplace with a straight arched lintel, the arch stones being joggled on the joints. It seems also to have had an open timber roof, similar to that of the banqueting-hall at Doune. This upper hall being on nearly the same level as the hall in the keep, with

which it was no doubt connected by the small ante-room shown on the plan (Fig. 181), these rooms would probably be used as a suite of apartments.

The next range of buildings contains the kitchens and offices. These have however been somewhat altered when the later additions were made on the north side of the quadrangle.

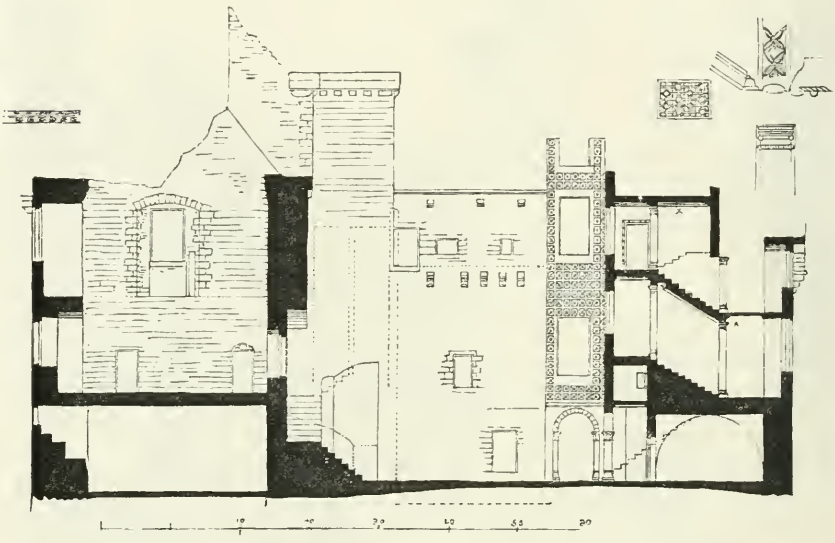


Fig. 183.—Crichton Castle. Section through Courtyard, looking West.

The ground floor contains, besides the usual cellars, a passage to a postern, close to which a stair leads to the kitchen on the first floor (Fig. 179). The kitchen fireplace is very large, taking in the full breadth of the room, or 21 feet, and being fully 10 feet deep. This wide opening is arched in two spans, with a pillar in the centre. There is a shoot at one side, by which ashes, etc., might be discharged. Adjoining the kitchen on the north are two good pantries, and on the south side there is a large back-kitchen or scullery, with sink and drain. The square block at the south end of this range has a very massive appearance, and has hitherto been erroneously described as the original keep of the castle. It formed a defensive tower at the south-west angle of the castle, but is clearly of the same date as the adjoining buildings. This tower was divided with several wooden floors in its height, and was probably used as bedrooms. It is the only part of the castle where there are no vaulted floors.

On the second floor above this kitchen there occurs another kitchen

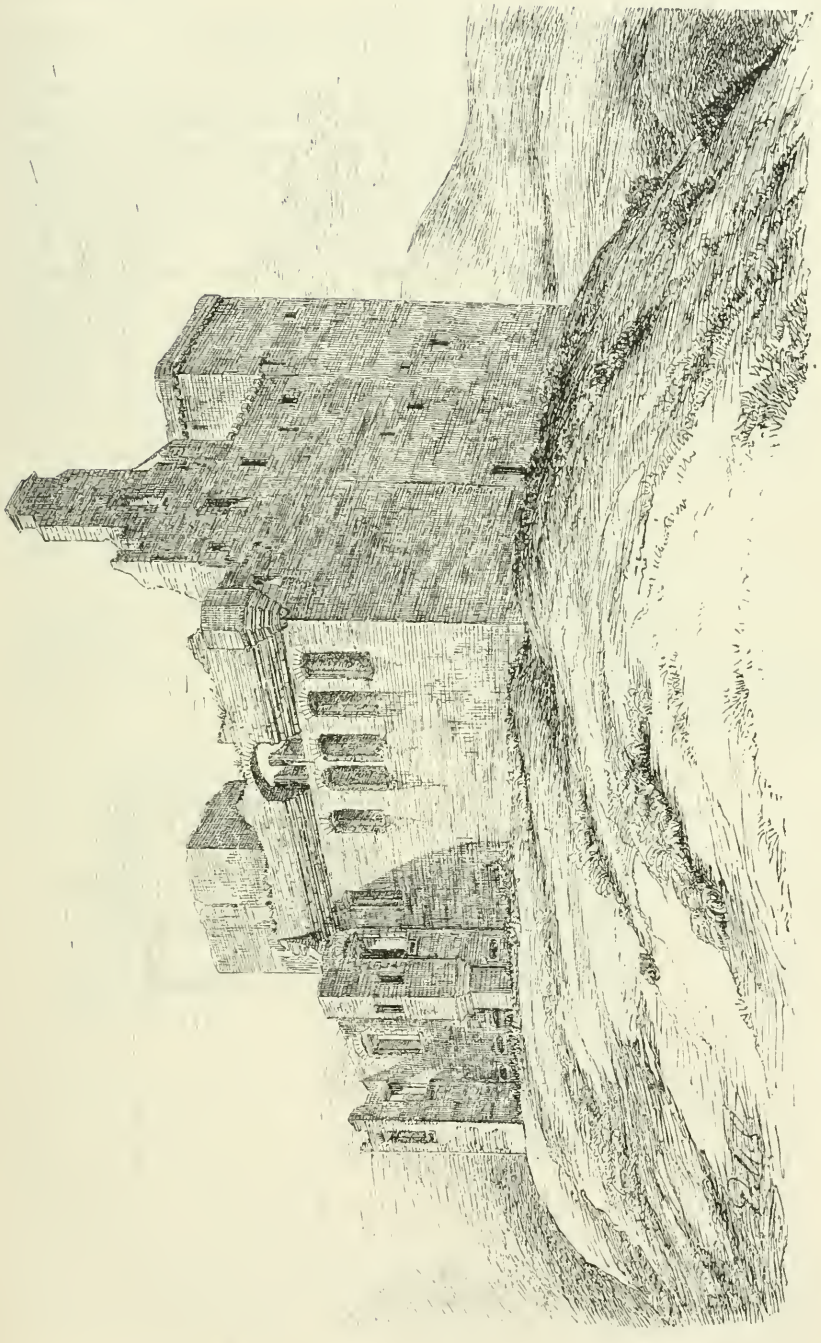


Fig. 184.—Crichton Castle from the North-West.

(Fig. 181), which seems to have been used in connection with the upper hall or withdrawing-room.

The corbels and holes in the wall may still be seen (Figs. 182, 183) which carried an overhanging wooden passage projected on the east side of this floor, and containing a service window from the upper kitchen. The object of this arrangement seems to have been to give access from this kitchen to the upper hall without passing through the corner block and interfering with its use as bedrooms. The upper hall would thus appear to have served as a private dining-room, as well as a withdrawing-room.

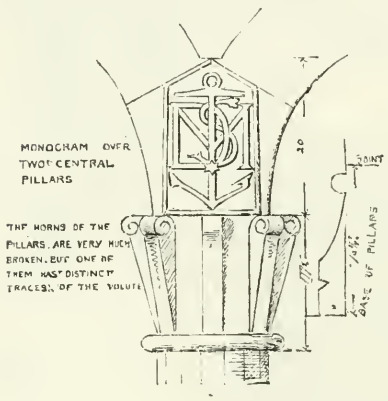

MONOGRAM OVER TWO CENTRAL PILLARS
THE HORNS OF THE PILLARS ARE VERY MUCH BROKEN, BUT ONE OF THEM HAS DISTINCT TRACES OF THE VOLUTE
FRONT
BASE OF PILLARS

FIG. 185.—Caps of Corridor and Central Monogram above.

Fig. 180 shows the massive and imposing character of the buildings added in the fifteenth century, the corbelling and machicolations being of unusual magnitude.

In the seventeenth century the use of private dining and reception rooms, quite distinct from the hall and public reception rooms, came into fashion. This seems to have been the motive for the erection of the suite of apartments on the north side of the quadrangle.

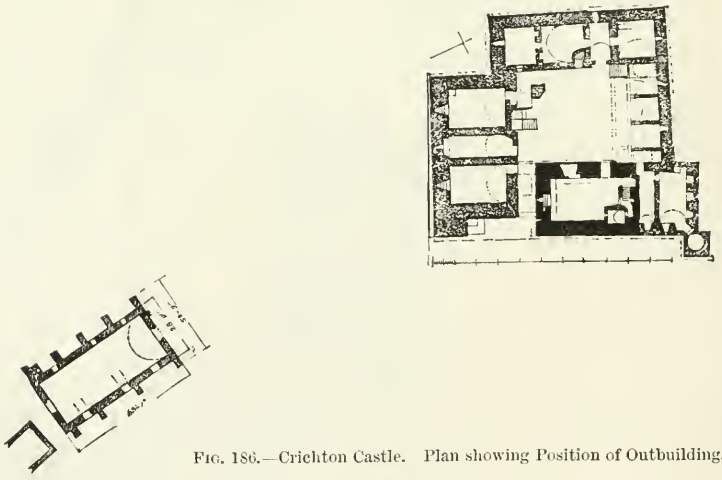


FIG. 186.—Crichton Castle. Plan showing Position of Outbuilding.

About this date too the old turnpike form of staircases gave way to more spacious and commodious square stairs.

The new buildings contain all the newest requirements. They are

entered by a very handsome square staircase (Fig. 183) with steps 5 feet 6 inches wide. The solid newel is ornamented with attached pillars at each landing, having ornamented caps and bases, and carved and flowered string-courses at the landings. The roof of the staircase is of stone, and is wrought with raised ribs in imitation of the plaster ceilings of the Elizabethan period (see sketch, Fig. 183). This is certainly one of the handsomest staircases of its period in Scotland.

Entering from this staircase, on the first floor is a spacious private dining-room, and beyond it a private sitting-room or withdrawing-room. This dining-room is so placed as to be in communication with the kitchen. On the upper floor the same accommodation is repeated, the rooms over the dining-room and drawing-room having probably been bedrooms. There was also an attic floor above this, which would contain several bedrooms.

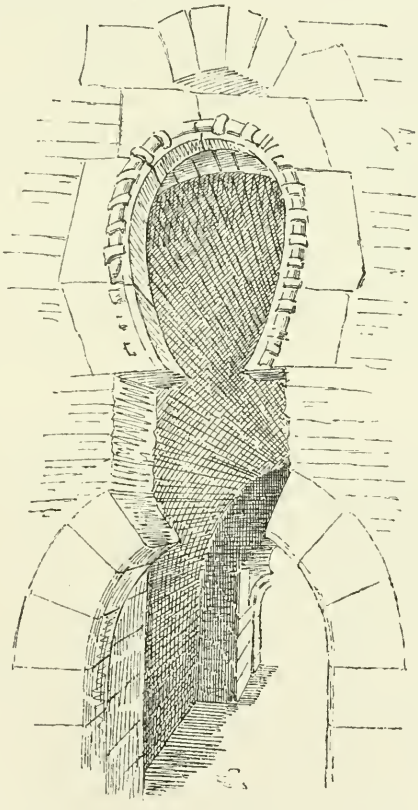


Fig. 187.—Crichton Castle. Doorway and Window in North Gable of Stables.

The buildings on this side of the quadrangle evidently belong to about the year 1600, with the exception of the lower part of the exterior wall, which is very thick, and has a very old appearance. This was no doubt the ancient wall of enceinte, which has been incorporated in the new buildings. There is the same mixture of the Renaissance and Scotch styles in these buildings as may be seen in most of the other buildings of the same period. We have in these examples the turrets and corbellings (Fig. 184) so common in Scotch work, mingled with features which strongly recall many Renaissance buildings on the Continent, especially in Germany and the Low Countries. The square facets covering the walls above an arcaded corridor, with multangular columns and peculiar caps, which are the well-known characteristics of Crichton Castle (Figs. 182, 185), may be seen at the Rath-haus of Lübeck.

The carved work in the staircase is also of the mixed kind belonging to the time of James VI.

Besides the great staircase above alluded to, another wide circular staircase was added about this time in the south-west angle of the court-yard, instead of the narrow turnpike stair which had hitherto been the only means of access at this point to the upper floors. But this angle staircase is now almost entirely demolished.

There is a building at the distance and in the position shown with reference to the castle (Fig. 186), which is always called the Chapel. It is 63 feet long by 33 feet wide, and has buttresses on each side. There is a door in the centre of each end. Apparently this building has originally been of one story, and vaulted (as it still is), and the buttresses seem to have been added to resist the thrust of the vault. At a later date the building has been raised so as to admit of rooms on an upper floor, the windows of which still exist.

There is a peculiar horseshoe-shaped ornament (Fig. 187) round a small window over the door at the north end.

There are no features about the building to enable one to say positively what it may have been, but it seems most likely to have been the stables, with rooms for the servants above.

There are also some ruins still further off, which may have been farm buildings, but it is now impossible to say.

A considerable excavation in the hill behind the castle shows that the stone used in the building was quarried on the spot.

Note.

It must be distinctly kept in view (as already pointed out) that all the above extensions of the fourteenth-century keeps are of considerably later date than the keeps themselves, the description of the extensions being merely introduced, in connection with that of the original keeps, for the sake of convenience, and to avoid confusion by cutting up the description of each castle into sections.

The tower-built castles above described are especially characteristic of the Scotch Architecture of the fourteenth century. In France and England the contemporary fourteenth-century castles are of the grandest and most extensive description. The great castle of Pierrefonds in France, and the immense Edwardian piles of Caernarvon, Caerphilly, Conway, etc., in England, are contemporary with the towers and keeps in Scotland which we have just been considering, and they well mark the difference in wealth and culture between this country and its southern neighbours in the fourteenth century.

The keep plan of building was universal in Scotland during the fourteenth century. It was employed, as we have above seen, not only in the

smaller towers of the impoverished nobility, but even the royal palaces and castles were erected according to the same model. Dundonald Castle, a favourite residence of Robert II. and Robert III., although on a larger and grander scale than the common keeps, was still a simple tower on the same general plan. The palace at Rothesay, although connected with the circular wall of enceinte of a more ancient castle, is really a keep of the same type as Dundonald.

With the close of the fourteenth century a new style of castle-building began to be introduced. We may therefore regard the end of the fourteenth century as completing the Second Period of Scotch Castellated Architecture.

THE CASTELLATED AND DOMESTIC ARCHITECTURE OF SCOTLAND.

THIRD PERIOD—1400-1542.

The third period of Scotch castellated architecture commenced with the fifteenth century. About that time a few castles began to be erected on a different model from that of the keep-tower. These consisted of buildings surrounding a courtyard or quadrangle. The great castle of Doune, built by the Regent Murdoch, Duke of Albany (about 1400-1424), is of this description. The powerful castle of Tantallon, which also belonged to the Duke of Albany, and the rebuilding of Dirleton and Caerlaverock (both destroyed by Edward I.), were likewise carried out on this plan.

During the reigns of the first five Jameses the larger castles and royal palaces were all built or enlarged into castles with courtyards or quadrangles. Of these, fine examples existed in the palaces of Linlithgow, Stirling, Falkland, Holyrood, and Edinburgh Castle, although most of them have now been greatly altered.

The same general features are observable in the earlier and later examples of this period, but the details, whether ornamental or useful, become gradually more refined as time advances.

In the earlier castles, such as Doune and Tantallon, one part of the buildings forms a keep; but it is on quite a different plan from the simple Norman parallelogram. It is larger in extent, and contains increased accommodation on each floor, having towers attached, both for defence, and also to furnish additional apartments. The keep thus forms an independent and commodious residence. It is practically detached from the other portions of the castle. It has a separate entrance, and is capable of separate defence. The other buildings surrounding the quadrangle contain large reception or banqueting halls, the chapel, state-rooms for visitors, the kitchen, offices, etc.

The gateway is generally through part of the building. At Doune and Tantallon it passes through the keep under the hall. The long vaulted passage thus formed is useful, inasmuch as it may be strongly

defended with gates, portcullis, etc., as well as from apertures in the vault.

These edifices have a considerable resemblance to similar castles in France of about the same date. At Pierrefonds, for instance (*ante*, p. 47), the keep is a large building or residence capable of being detached from the rest of the castle. The entrance is under part of the buildings adjoining the keep, and is flanked by a large round tower similar to though on a larger scale than that at Doune.

In the later examples of these castles with quadrangles the defensive features are gradually reduced in importance, although never abandoned, and the buildings assume somewhat the appearance of the contemporary mansions in England. At Linlithgow and Stirling palaces, for example, the state and domestic apartments are more fully developed than in the earlier castles, and a richer and more fanciful design takes the place of the grander though more rugged architecture of defence of Doune and Tantallon. In these later edifices, especially at Linlithgow, may be observed a gradual assimilation to the contemporary English style of architecture, and in the early part of the sixteenth century (as at Stirling and Falkland) there are distinct traces of the approaching advent of the Renaissance. This is very observable in the palace at Stirling, built about 1500, where the classic ornament begins to be applied to the old forms, and where grotesque imitations of classic sculpture are for the first time introduced. These novelties are said to have been executed by foreign workmen, which is not improbable.

The above style of castles with quadrangles marks a distinct period in the history of Scottish architecture, commencing with the fifteenth century, and ending with the death of James v., in 1542. It thus exactly corresponds with the reigns of the first five Jameses, and forms the third period of our Scottish Castellated and Domestic Architecture. The castles with quadrangles of this period distinguish it from the preceding period, in which, as we have seen, there were no such castles.

They also distinguish it from the succeeding period, for although there were numerous castles with quadrangles after the above date, we shall see as we proceed that they were marked by features which distinguish them from those of the third period.

This period, like every other period of Scotch architecture, contains, in addition to the castles with quadrangles above referred to, a large number of contemporary castles built on the old keep plan.

A considerable number of buildings were also converted into castles with quadrangles by additions made to old keeps in the form of buildings surrounding a courtyard, in the same way as those of the first period which we have already considered, such as Crichton, Craigmillar, Castle Campbell, etc. The castles of this period, however, whether on the "courtyard" plan or the "keep" plan, have all a strong similarity of

detail, and are quite distinguishable from those of the preceding and succeeding periods.

The keeps of this period still continue to retain the simple quadrilateral plan. This is sometimes modified (as in the previous period) by the addition of a wing at one corner, in order to provide extended accommodation. As formerly, the ground floor is vaulted and contains stores. The hall occupies the whole of the first floor, the wing, when there is one, containing the owner's private room. In the exceptional case of Borthwick Castle there are two such wings, whereby greatly enlarged accommodation is obtained.

A separate kitchen is frequently to be observed, timidly introduced at first, and more distinctly developed in later specimens.

The entrance door is usually on the first floor, and the staircases are almost always narrow newel ones, generally in the thickness of the wall. When there is a wing, the entrance door is commonly in the re-entering angle, where it is well situated for defence. In later examples a turret is introduced into the re-entering angle of the wing, containing the entrance door on the ground level and the staircase, which is thus conveniently placed for giving access to the rooms both in the main building and the wing. These doorways were generally furnished with oaken doors, strengthened with strong bars running in grooves formed in the walls. The entrances were also frequently provided in addition with iron-grated gates or "yetts" (which were subjects of legislation), and the windows were secured with strong iron-grated stanchions.

Above the hall there are generally two upper stories with joisted floors, and there is sometimes a vault over the top story to carry a stone roof. The walls vary from 5 to 10 feet in thickness, and wall chambers usually abound. In some instances (notably that of Elphinstone) this feature of the design is carried out in a most elaborate and complicated manner, and the amount of accommodation thereby provided is remarkable.

The "pit" or prison is of frequent occurrence. It is generally a small wall chamber with an air-hole in the outer wall. It is entered only from above by an aperture in the vault, which is secured by being covered with a properly-fitting stone.

The defences both of the "quadrangle" and "keep" castles of the third period are, as of old, chiefly from the battlements. These vary very much in design, the greater number having bold projecting corbels, with machicolations between, as at Crichton, Dunnottar, and Spynie, while others have only corbels without machicolations, such as Borthwick and Balvaird. Others again have neither corbels nor machicolations, but have the parapet carried up flush with the outer face of the wall, without even a string-course to mark it, such as Liberton Tower. At

Tantallon, and other instances, the parapets rest on a string-course having the form of continuous corbels. Several examples occur of the use of hoards for the defence of the walls, as at Craigmillar, Arbroath Abbey, Preston, etc. In the later examples of the period the corbels are generally more or less ornamental, and in some instances the originally useful corbels begin to be applied as mere ornaments, as at Craignethan, Edzell, and Leven Castles, where the lower of the two rows of corbels under the parapet carries nothing, and is inserted for ornament only.

The parapets have almost invariably rounded open bartizans at the angles, carried on a series of corbels, and a good stone gutter or parapet walk all round the building. Those at Borthwick and Balvaird are well preserved.

In the later examples, as, for instance, at Ruthven Castle, the bartizans are beginning to be covered in with a roof, so as to form the angle turret, which became so prominent a feature of the later development of the Scotch style of Architecture.

During this period artillery began to be employed in the attack and defence of fortified places; and we find indications of the early provision made for its introduction into castles in the large embrasures or port-holes so characteristic of the time.

There is not usually much ornamentation in the interior. The hall has invariably a large fireplace, the jambs of which are frequently carved with shafts having caps and bases. At Doune Castle the fireplace is double, and at Linlithgow Palace it is triple, with shafted divisions between. The lintel of the hall fireplaces is moulded, and is sometimes adorned with shields containing coats of arms, etc. In Borthwick and Crichton Castles, and Linlithgow Palace, the fireplaces and other portions of the buildings are unusually richly carved with fifteenth-century foliage. An enriched ambry or a seat is sometimes introduced in the wall of the hall, as at Borthwick, Dirleton, Balvaird, etc.

The domestic chapel is not common in the castles of this or the previous period, those of Linlithgow Palace and Craigmillar Castle being somewhat exceptional cases. There are, however, good examples of oratories in window recesses at Doune and Borthwick Castles, and a very fine private oratory occurs at Affleck Castle, Forfarshire.

During this period some castles of an exceptional character were erected, such as those of Hermitage and Crookston. These are founded on the general idea of the keep, but they have rectangular towers added at each of the four angles. Other castles, again, are of an intermediate type between the keep and the castles with quadrangles, the main building being extended with towers and wings so as to form an enlarged residence, and these buildings are carried out with a better style of workmanship than the ordinary keeps. Of

these, the castles of Morton, Ravenscraig, and Tullyallan are good examples.

The enlargement of ancient keeps by additions was also in some cases carried out in an unusual manner. Thus, at Ruthven Castle, Perth, and the Dean Castle, Kilmarnock, the additions were not made in the form of buildings connected with the keep, and extending round a quadrangle, but by the erection of a separate tower, or other buildings, at another part of the enceinte, and entirely detached from the original keep.

These cases will all be considered in detail in connection with the description of the castles themselves.

In describing the individual castles of this period it will be most convenient to begin with examples of the simple form of keep, similar to that usual in the previous century. We shall then give some examples of keeps in which the simple quadrilateral form became modified in various ways. We shall see that the L plan, or that of adding a wing to one corner, which was introduced in the fourteenth century, is still frequently used, while various further modifications of the simple keep are gradually introduced. Thus in some cases two wings are added and in other cases a projecting staircase is introduced in the re-entering angle of the wing. A few special and exceptional modifications of the keep plan will then be given.

Following the same course as in the Second Period, we shall next show how the fifteenth-century keeps were enlarged into castles surrounding courtyards or quadrangles, and finally describe the castles which were designed and built on that plan from the first, and which specially distinguish this period of Scotch Domestic Architecture.

THIRD PERIOD—SIMPLE KEEPS.

Beginning with the simple keeps of the fifteenth century, we have a good example of a plain quadrilateral building in Liberton Tower, near Edinburgh.

LIBERTON TOWER, Midlothian.

Liberton Tower is a fifteenth-century keep, which, from the extreme plainness of its form, and its generally frail and dilapidated condition, is frequently assigned to a much earlier period. The simple quadrilateral outline (Fig. 188) is quite usual, and the internal arrangements are somewhat similar to those of Lochleven. The whole height (see Section) is divided into two by a semicircular vault in the centre, above which is situated the hall. The upper portion is also vaulted, with a pointed

barrel vault, which carries the stone roof. Each vaulted compartment is divided into two stories, with wooden floors resting on corbels. The

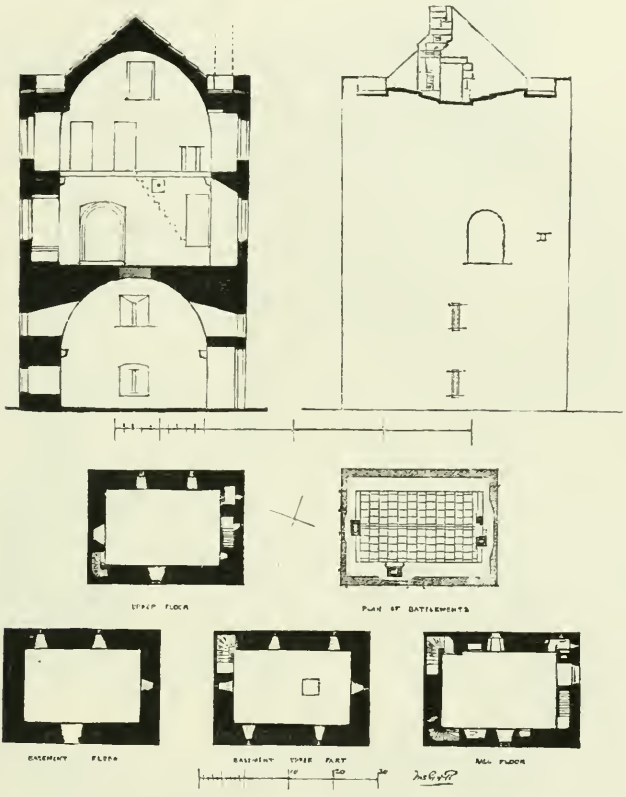


Fig. 188.—Liberton Tower. Plans, Sections, and Elevation.

timbers of the upper floor are still partly preserved (Fig. 189), and show the mode of construction then in use. The beams, on the corbels, are $6\frac{1}{2}$ inches by 5 inches, laid at 2 feet 6 inches apart, and the joists are 3 inches by 2 inches, laid on the flat and mortised into the beams.

The ground floor is only $6\frac{1}{2}$ feet high, and has probably been used for sheltering cattle. It has a separate outer door, and had no communication with the upper floors unless, as is most likely, there was a hatch in the floor above. The first floor is in the lower vault, and communicates with the hall by a stair *down* from the hall in the north-west angle. This has been the cellar and stores, and has a hatch in the centre of the vault.

The principal entrance to the tower (Fig. 190, N.E. view) is on the level of the hall, whence the above stair goes down, and two other stairs

lead up to the upper flat, which would be divided into two rooms, each

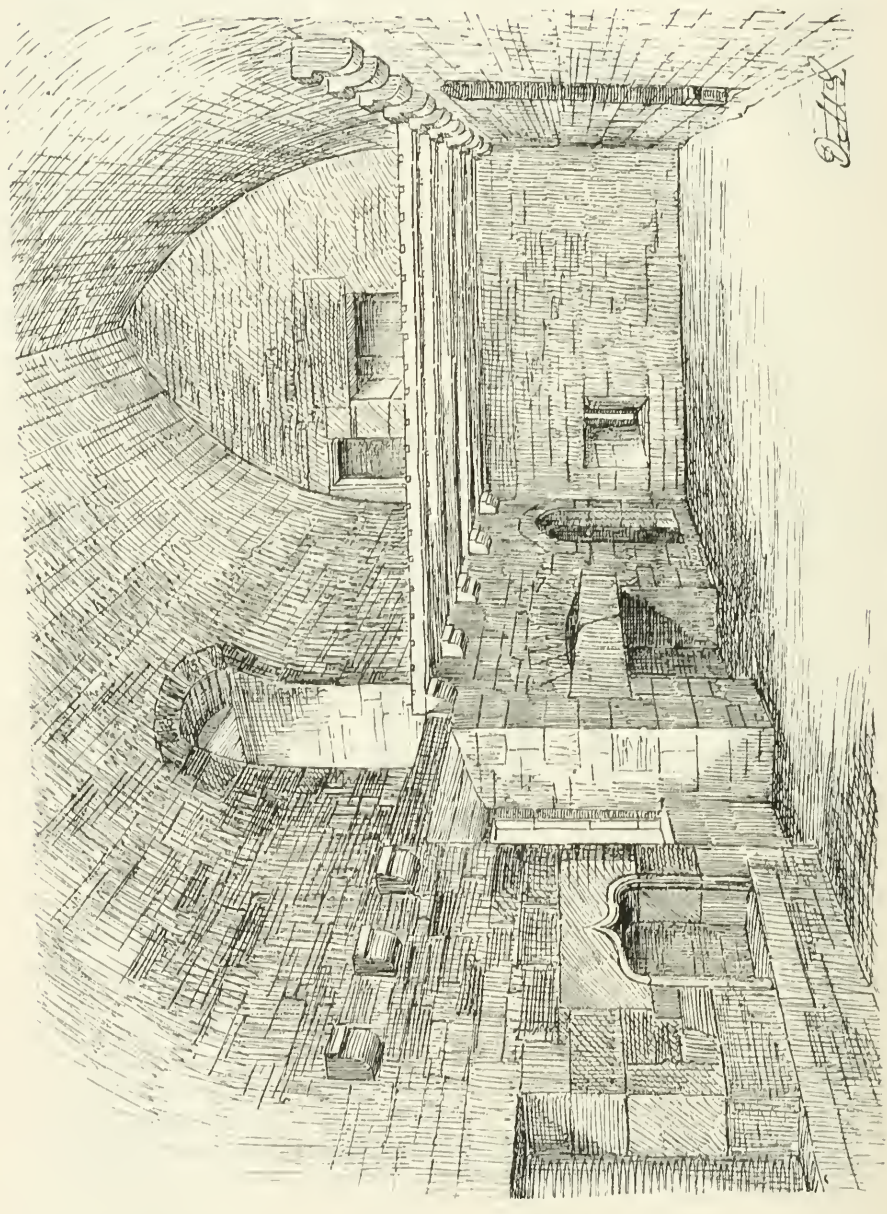


Fig. 189.—Liberton Tower. Interior of Hall.

thus having a separate stair. The eastern room formed the owner's private apartment. There is a small opening, or spy-hole, in the wall of the

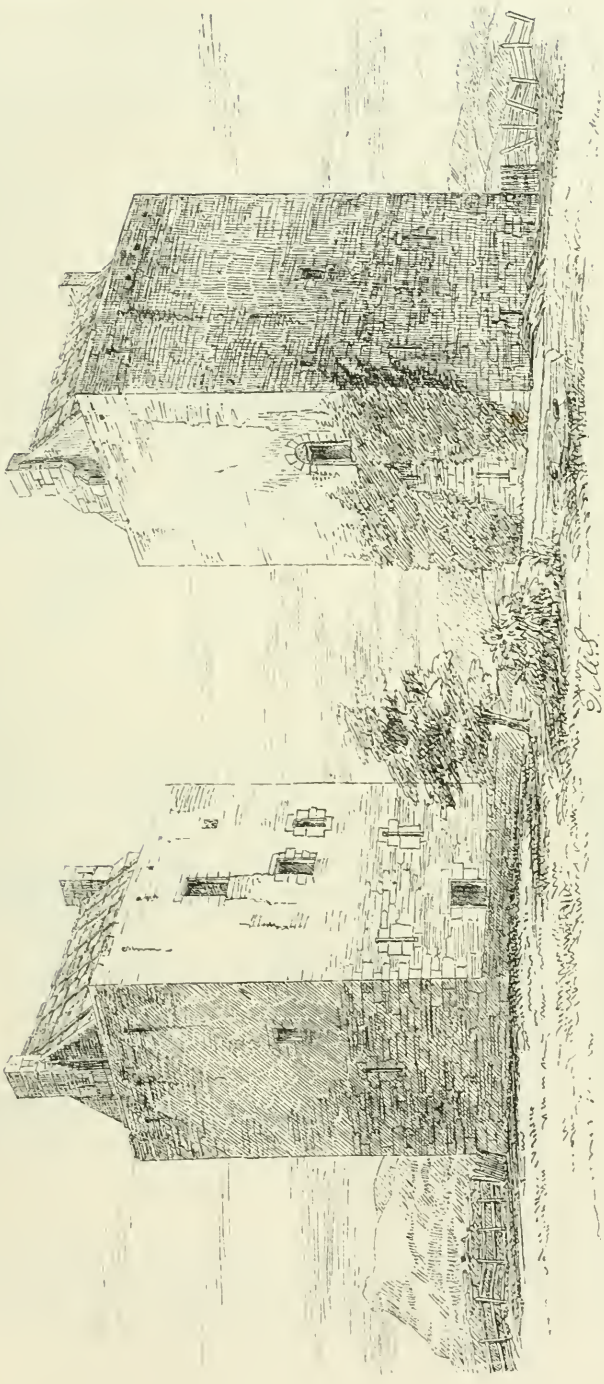


Fig. 190.—Liberton Tower. Views from the South-West and North-East.

straight staircase leading up to this floor at the east end of the building, from which a watch could be kept on the proceedings in the hall. There is no properly formed stair to the parapet, which must have been reached by a wooden inside stair leading to the door in the east gable. The access to the battlements would thus also be under the owner's eye. The parapet, as at Craigmillar, is carried up flush with the walls (Fig. 190), and has no corbels or projecting mouldings. Almost the only thing in the form of ornament in the tower is the sideboard of the hall in the south wall (Fig. 189), which has an ogee-headed opening clearly indicative of the fifteenth century. In the south elevation, near the top, there are traces of a human figure in a panel, which may have been a patron saint or part of a coat of arms.

The history of this tower is not recorded, but according to the Rev. Thomas White, in his account of the parish of Liberton in the first volume of *Transactions of the Antiquarian Society of Scotland*, "The Dalmahoys of that Ilk possessed Upper Liberton as early as the year 1453, and continued in possession of it, at least of a part of it, for almost two hundred years." This tower was in all probability built by that family.

MEARNS TOWER, Renfrewshire.

Mearns Tower (Fig. 191) is about seven miles south-west from Glasgow, and stands in an upland district overlooking the valley of the Clyde. It is situated on a small knoll having a level platform round the building, which at the west and north-west is narrow, and has precipitous slopes about 25 feet high. The tower is oblong on plan, measuring 44 feet from east to west by 29 feet 6 inches from north to south, and 45 feet high to the top of the corbels. It contains three floors, the two now remaining being vaulted, as shown on the section. The entrance doorway is at the east end, and leads directly into the basement or lower vault, which is lighted by two widely splayed slits. The existing outer doorway has evidently been enlarged in modern times. The eastern wall is here 10 feet in thickness, and the other walls are about 8 feet thick. From the entrance passage a straight flight of steps leads to the first floor, and in continuation a "corkscrew" stair leads to the top. Immediately over the entrance to the basement is the separate round arched doorway, forming the principal entrance to the castle on the first floor; the height from the ground to the door sill is 11 feet, and was reached by a ladder.

This doorway enters directly into the hall, which occupies the whole of the first floor as a single apartment, measuring 27 feet 9 inches long by 16 feet 6 inches wide, and 21 feet high. This vault is loftier than

is usual in buildings of this class, unless where they are subdivided into two stories, which does not seem to have been the intention here, as there are no corbels in the side walls for a floor, and no windows to light an upper story. The object of the height appears to have been

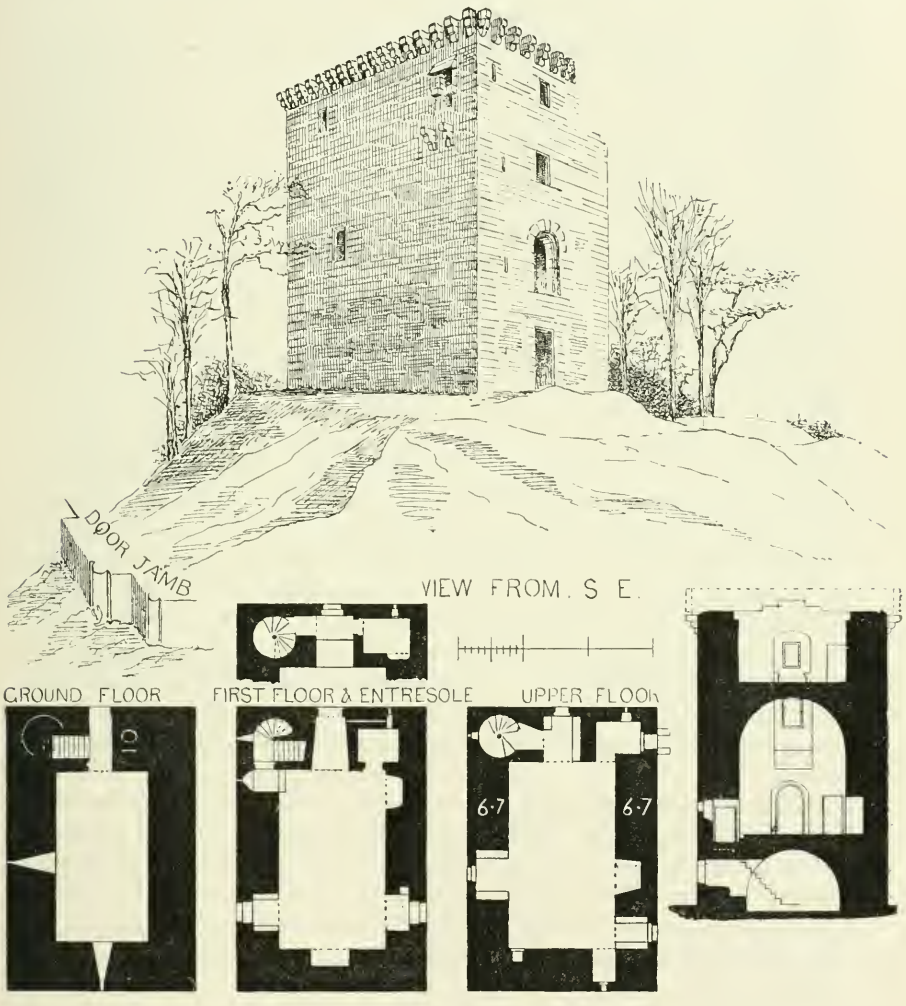


Fig. 191.—Mearns Tower. Plans, Section, and View.

to introduce in the east wall an entresol, entering off the corkscrew stair, forming what is usually called a minstrel's gallery and a wall closet (see Plans). A similar entresol, apparently for the same purpose, occurs at the Dean Castle, Kilmarnock.

Adjoining the first floor entrance is a lighted wall closet, and at the opposite end is the fireplace, with windows in the side walls having stone seats.

The upper floor is very similar in arrangement to the first. From its wall closet a garde-robe is projected on the south front. This is now very ruinous, only the supporting stone corbels remaining with the upper courses of the sloping stone roof. The continuation of the stair to the battlements is gone, as well as the "cape house" on the top of the stair and the parapets.

There is a set-off inside the walls at the top, evidently for the support of roof beams, but of what form the roof was, whether flat or sloping, we cannot precisely say. From the terms of the licence to be presently quoted there was to be erected on the roof warlike apparatus for its defence, so that in all likelihood the roof was flat. Mr. Fraser, in his work on Caerlaverock, informs us of the important fact that James II., on the 15th March 1449, granted a licence to Herbert Lord Maxwell "to build a castle or fortalice on the Barony of Mearns in Renfrewshire, to surround and fortify it with walls and ditches, to strengthen it by iron gates, and to erect on the top of it all warlike apparatus necessary for its defence." This interesting circumstance adds greatly to the value of Mearns Castle historically, making it a standard by which we may estimate the date of other similar structures. Most of the buildings of this class and period being undated, any authentic information of this sort is of the utmost importance. We need have no hesitation in assuming that the fortalice was built shortly after the date of the licence, as it corresponds in general arrangements and in the style of its corbels with other castles, such as Borthwick, of which the date is known. In 1589 James VI. writes from Craigmillar to William, fifth Lord Herries, commanding him to deliver up the castles of Caerlaverock, Threave, Morton, and the place and fortalice of Mearns.

About the middle of the seventeenth century Mearns was sold by the Earl of Nithsdale to Sir George Maxwell of Nether Pollok, in the immediate neighbourhood, and shortly afterwards it passed into the possession of the ancestors of its present possessor, Sir Michael Shaw Stewart. The castle has been in use till comparatively recent times as a place for local balls and festivities, but it is now entirely neglected, and is fast falling into utter ruin.

ELPHINSTONE CASTLE, Midlothian.

This is one of the most remarkable and best preserved of the Scottish keeps of the fifteenth century. Situated on the southern brow of a hill overlooking Ormiston and the valley of the Tyne, a wide prospect is obtained from its windows and battlements. It is a simple oblong on plan (Fig. 192), 50 feet 5 inches long by 35 feet wide, and 58 feet 3 inches in height to the top of the parapet. The tower contains a basement floor covered with a round vault (having corbels for a joisted intermediate floor), a first floor with a high pointed vault, and two stories above, which appear to have had wooden floors, thus making five floors in all. It is quite usual for towers of this period to have chambers and closets in the thickness of the walls, but in this case that arrangement is carried to an extreme length, all the walls being honeycombed with a perfect labyrinth of small mural chambers. We have endeavoured to make the following description of this rather intricate building as clear as possible by complete plans and sections, to which the reader may refer.

The entrance doorway, which is round-headed, is on the north side, and up a few feet from the ground. In the thickness of the north wall a straight stair, with roof arched in compartments (see Section along north wall), leads up, first to the upper floor of the lower vault, and then continues up to the level of the great hall floor. To the right of the entrance to the keep a few high steps lead to a wall chamber, raised thus to give room for another chamber sloping down from the basement floor, the door to which is seen on the Section looking west. These were probably the guard-room and prison. A wooden trap leads down a few steps to the basement floor from the raised entrance. The great hall occupies most of the first floor, and measures 29 feet in length by 20 feet in width, and 23 feet high to the top of the vault. It is a noble apartment lighted by two side windows, with wall chambers leading off each (Fig. 193), and by two high windows, also in the side walls, shown by dotted lines on the plan. At the west end is a large fireplace, sadly mutilated; adjoining this fireplace a door, now built up, led to a small private room, also reached by a door from the north window recess, while a narrow newel stair between the room and window led to a similar room above, both being contained within the height of the great hall (see Section along north wall). There is a very peculiar arrangement connected with this upper private room (Entresol Plan). It contains a fireplace, alongside of which a door leads into a window recess in the west wall; this window opens into the chimney-flue of the great hall fireplace, and in the breast of the flue, opposite the window, and at the same level, is a large splayed inner window overlooking the great hall

about 10 feet above the floor (Sections looking west and north). Thus the lord or lady, by stepping out of their private room to this window, could overlook what was going on in the hall, subject to the incon-

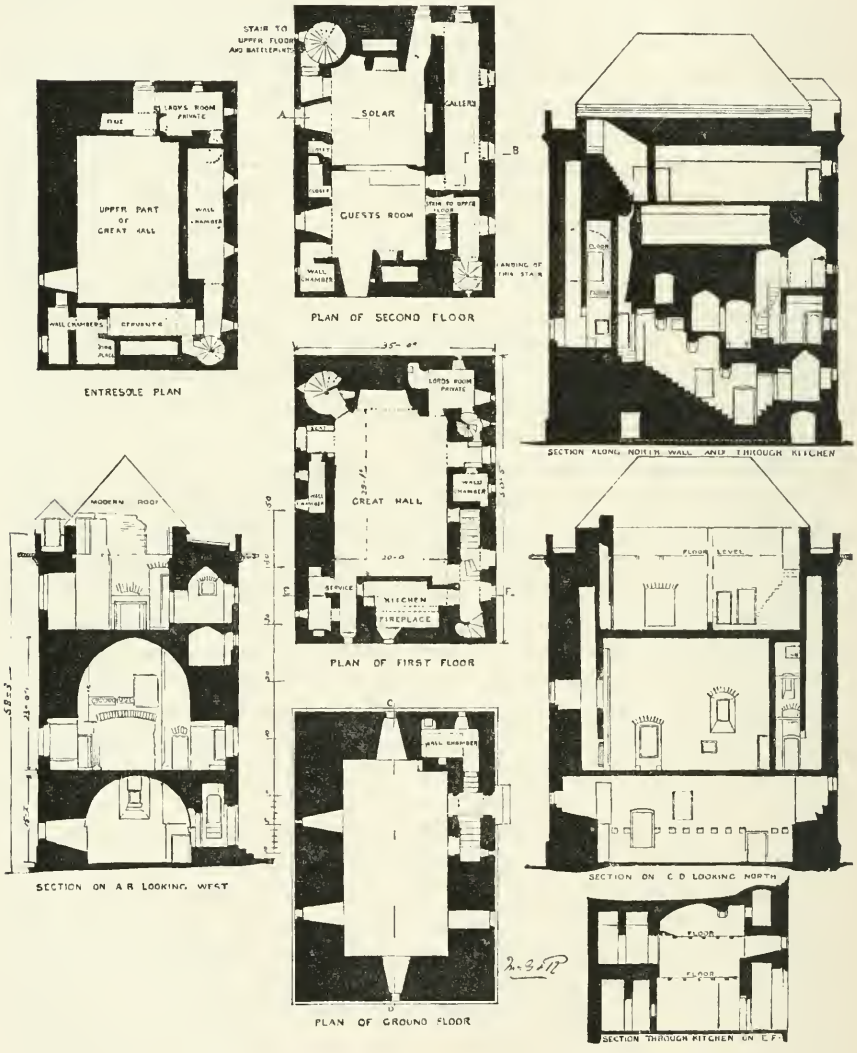


Fig. 192.—Elphinstone Castle. Plans and Sections.

venience of the smoke (when there was any) from the great hall fire. Spy-holes are frequently to be met with in old castles, but this one is of a unique kind. Into this very fireplace there is a small spy-hole from

the adjoining staircase (shown on the Plan). The above window would also give some light in the hall, not otherwise too bright, and the upper part of the chimney may have been used for curing hams, etc., to which the door above referred to would give access. The kitchen, about 13 feet by 7 feet (including the fireplace), is at the opposite end of the hall, and is provided with a service window and large wall closet. Within the height of the great hall (see Sections along the wall and

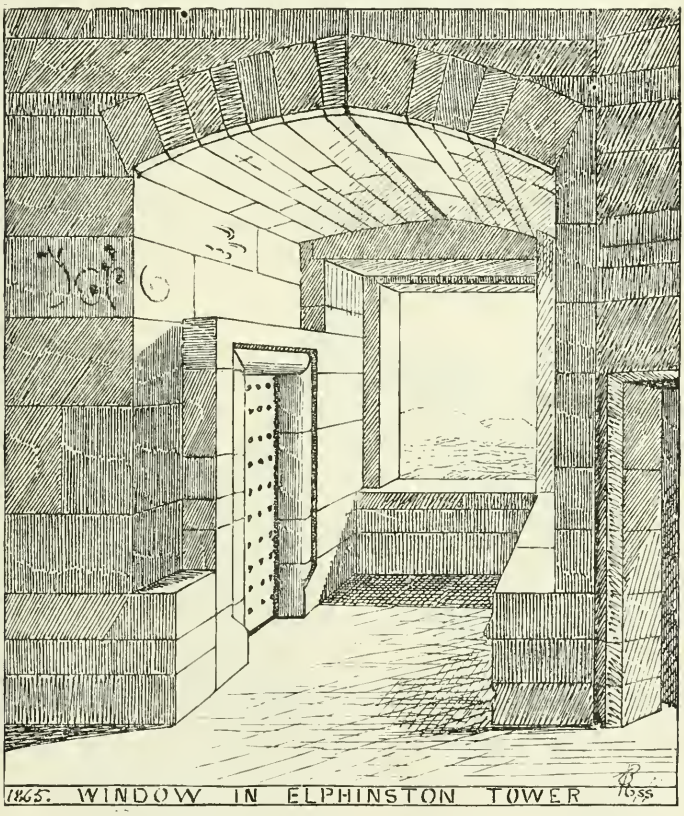


Fig. 193.—Elphinstone Castle. Window in Hall.

through kitchen) the space above the kitchen is divided into two upper stories, the joisting of which still remains, although the floor immediately above the kitchen may be regarded as only a passage to wall chambers at the south-east corner of the keep. This passage is reached by a circular stair in the north-east corner, while the upper kitchen floor must have been reached by a ladder. This stair leads to the floor above the hall, and to a large intermediate wall chamber 6 feet 4 inches wide by about 24 feet long, taken out of the haunch of the great

hall arch (Section looking west). Another stair in the south-west corner leads to both floors above the hall, and also to the battlements, while another private stair in the thickness of the north wall communicates between these two floors. Both of the upper floors are divided into two rooms, all having fireplaces, garde-robes, and wall closets. Adjoining the apartments over the hall in the north wall (plan of second floor) is a gallery 30 feet long by 6 feet wide communicating with both rooms. This is perhaps the most striking example of the system of wall chambers carried to excess. It will be recollected that we drew attention to this practice as possibly being a tradition from the time of the Celtic Brochs, and we believe that a careful study of this plan, and still more of the building itself, will tend to confirm this view.

The present Lord Elphinstone, in M'Neill's *Traucut and its Surroundings*, assigns the erection of this castle to John de Elphinstone, who died about the year 1260; but we cannot agree with his Lordship in giving it such an early date. In all its architectural features it resembles ordinary fifteenth-century work, while the corbelling, cable

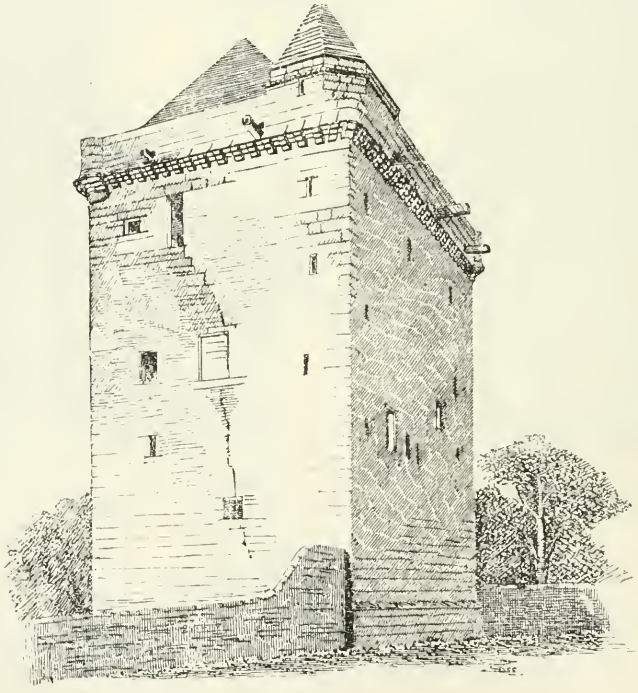


Fig. 194.—Elphinstone Castle. View from the South-West.

moulding, and gargoyles at the parapet (Fig. 194), some of which are carved to resemble cannons, cannot be earlier than the end of the

century. As throwing some light on the subject, we may draw attention to the armorial bearings carved over the hall fireplace, and which are illustrated and named in their order (Fig. 195). The Seaton arms occur

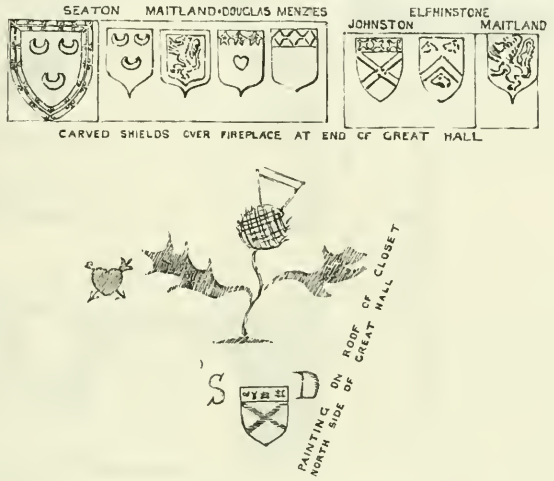


Fig. 195.—Elphinstone Castle. Arms over Fireplace in Hall.

twice, and that family was twice connected with the house. The Johnston arms also occur. After the battle of Piperdean, in 1435, where Sir Alexander Elphinstone was killed, his only daughter Agnes succeeded to the estate. She married a Johnston of Annandale, and it was in all probability after this event that the castle was built, and hence the Johnston arms, which are also painted on the arched roof of one of the hall closets with the letters S. D., along with a pierced heart, a thistle, and a rose. The other arms probably indicate previous alliances with the house.

Traces of painting can be seen throughout the great hall, but in too fragmentary a state to admit of description. It is a pleasure to add that the building is well cared for, and the roof, which is modern, is in good order, and is perfectly water-tight.

In the seventeenth century a wing was added to the north of the keep, but it has now been removed.

COMLONGAN CASTLE, Dumfriesshire.

Comlongan Castle, Dumfriesshire, is situated about midway between Dumfries and Annan, and lies about two miles inland from the Solway Firth. It is very similar to Elphinstone Castle, and is clearly of about the same date. The building is in a good state of preservation, but no

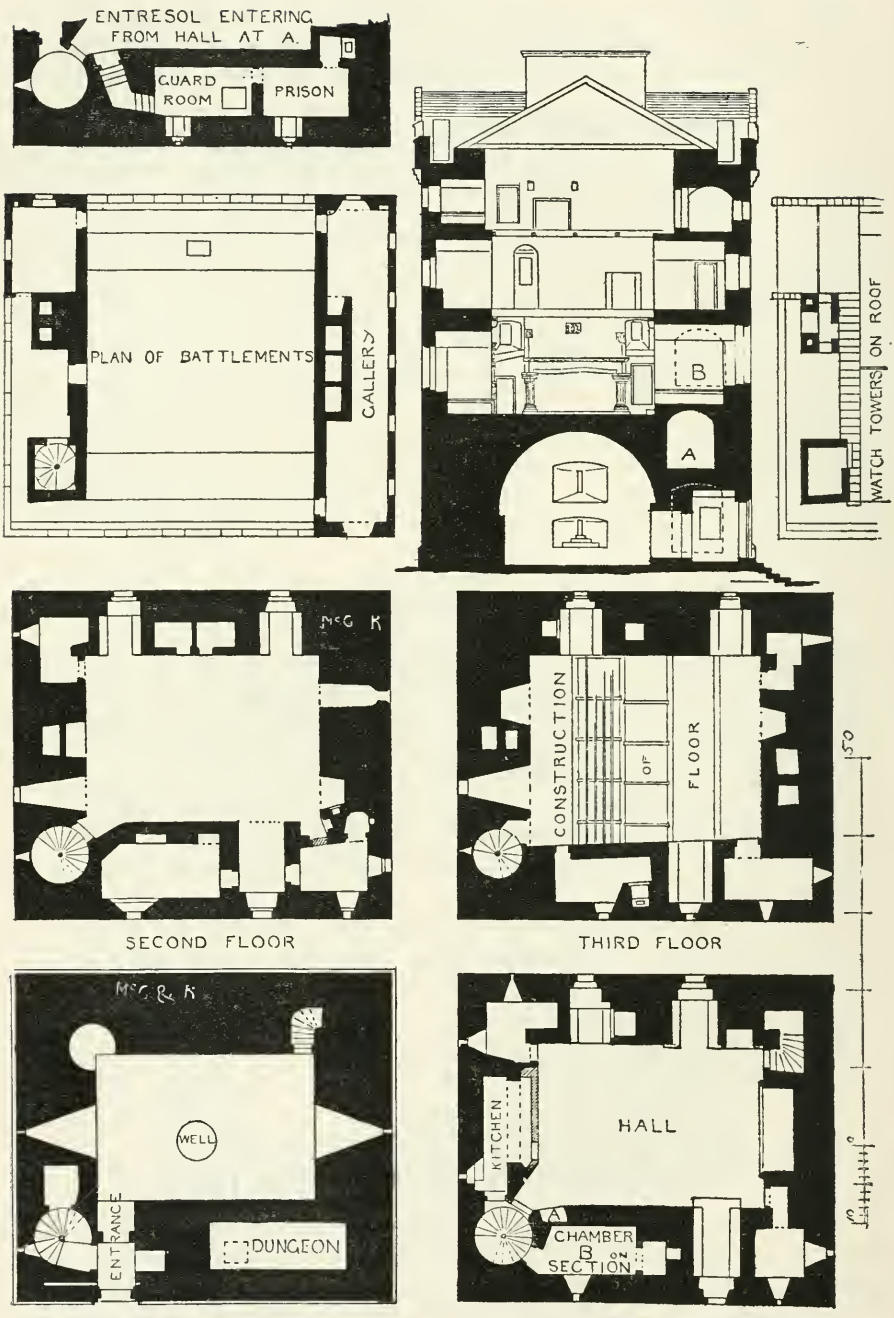


Fig. 196.—Comlongan Castle. Plans and Section.

special care has been taken for a long time to maintain it, so that cracks and fissures are beginning to develop themselves in various parts of the building, which unarrested will soon bring about its ruin. The castle is nearly square on plan (Fig. 196), measuring 48 feet 10 inches from east to west by 42 feet 7 inches from north to south. Its height is about 59 feet to the top of the battlements (see Section), and about 68 feet to the top of the south-east watch turret, which is the highest point. The basement has a vault 17 feet 5 inches high, divided with an intermediate wooden floor. The vault carries the floor of the hall, and above this there are two stories which had joisted floors.

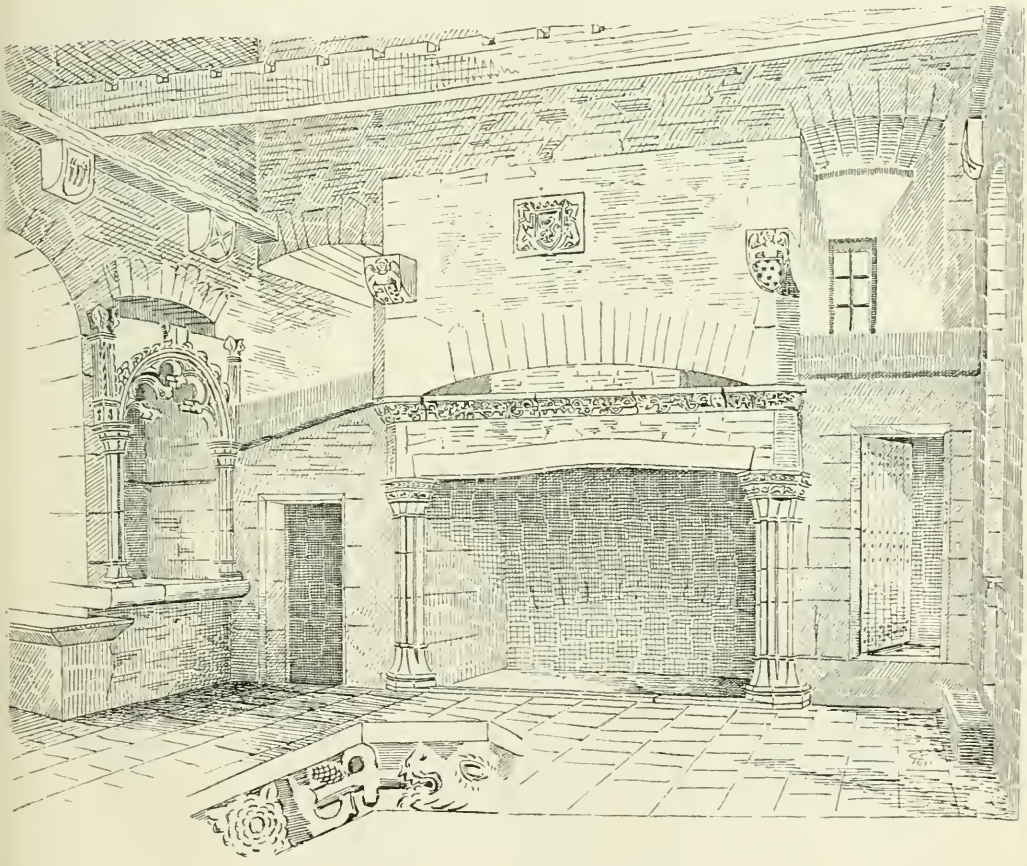


Fig. 197.—Comlongan Castle. Interior of Hall.

The entrance doorway, which is up five steps, is at the north side, through a round arched doorway with an iron yett and bar-hole. A

newel stair in the north-east corner leads straight to the top, communicating with all the intermediate floors. Another wheel stair leads from the hall at the south-west corner down to the loft in the vault. There is a well near the centre of the basement floor.

The hall (Fig. 197) is a very fine chamber, measuring 29 feet 4 inches by 21 feet 2 inches, and about 14 feet 6 inches in height to the under side of the beams. It has a finely carved fireplace at the west end, with the unusual feature of an oaken beam for its lintel 10 inches in depth by 12 inches thick, the length between the supports being about 10 feet 9 inches. As the sketch shows, it is far from being horizontal.

Adjoining the fireplace on the south wall there is a fine sideboard or ambry (Fig. 198) 3 feet 6 inches above the floor, and about 6 feet high in itself, by 4 feet 9 inches wide over the moulded shafts. The arched top is wrought in two stones, and the two halves do not correspond, which produces a singular but by no means unpleasing effect. The details are of the usual late Gothic kind, frequently found in castles of the latter half of the fifteenth century.

The hall is well lighted with three windows, having seats in the recesses. The walls being from 9 to 12 feet in thickness, the recesses are very deep. Besides these windows there are four small windows, two in each gable, placed high in the wall near the ceiling. Two good mural chambers enter from the hall level, and others from the other floors. Indeed, throughout the castle the walls are quite burrowed with small chambers, and in this respect Comlongan bears a considerable resemblance to Elphinstone. One of these mural chambers enters from the hall down ten steps. This chamber is divided into a guard-room and prison, and lighted with small seated windows. From the first chamber a hatchway drops down to a totally dark dungeon 10 feet 9 inches below the level of the floor. The dungeon measures about 18 feet by 6 feet, and seems to have no communication with the open air.

The inner of these two mural chambers has a garde-robe opening off it. A few steps up the main stair from the hall there is another large mural chamber with garde-robe. A wall chamber entering off the main stair at the hall level seems to have been the kitchen. It is about 14 feet long by 6 feet 3 inches wide, and is lighted with one small window. It occupies a similar position, and is of about the same size as the kitchen at Elphinstone. Originally this chamber seems to have opened directly into the hall by an open arch (shown on Plan) 10 feet 6 inches wide by 7 feet 6 inches high. The partition between the arch and the hall (hatched on Plan) has not the appearance of being original, and may have superseded an earlier screen. In this partition there is a service window. This kitchen is really nothing more than a large fireplace. The flue has been long closed up, but its continuation may be seen at the back of the fireplace in the room above. The hall is paved with the

red pavement of the district, in stones of about 18 inches square. In a panel let into the wall over the fireplace, but considerably off the centre,

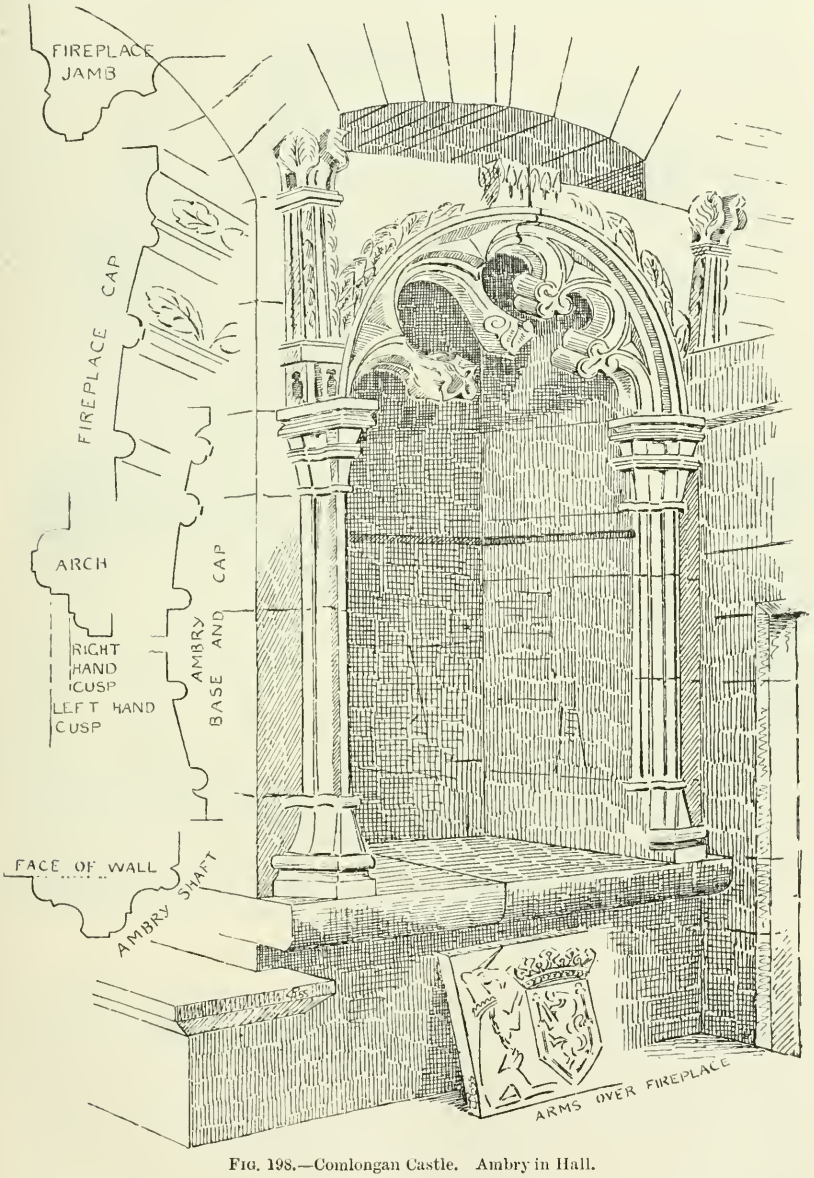


Fig. 198.—Comlongan Castle. Ambry in Hall.

the Royal arms are carved in stone, and at each side are two stone corbels, with angels holding shields charged with the arms of the family.

The corbels for carrying the beams of the floor above are also charged with arms, which are a good deal defaced and destroyed.

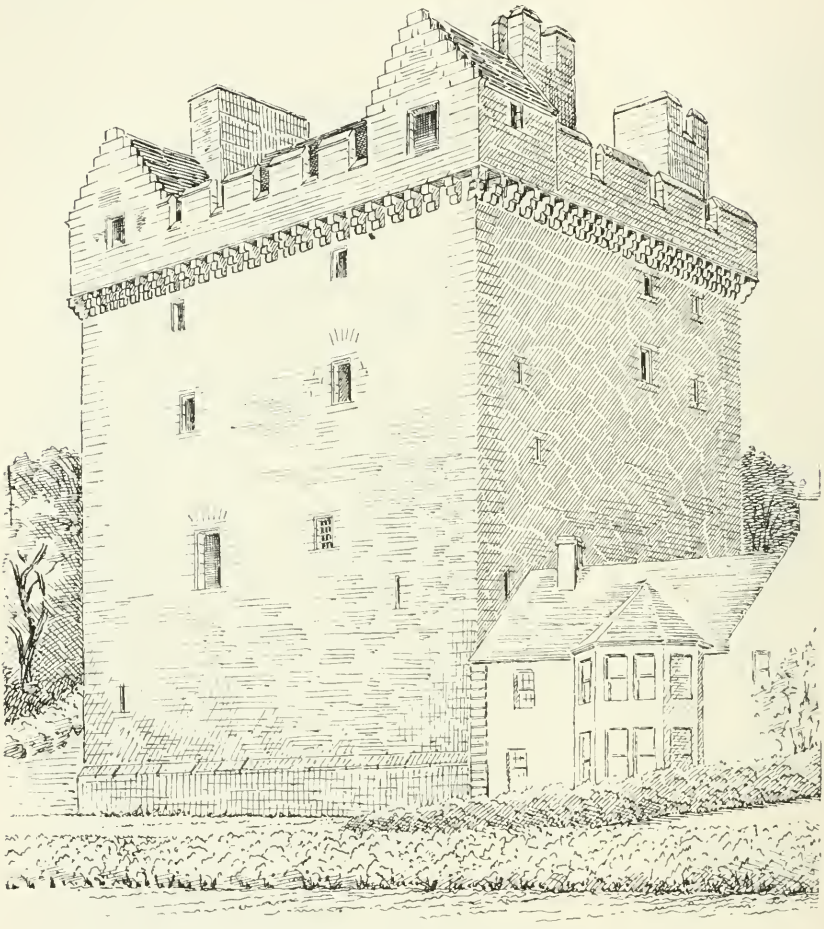


Fig. 199.—Comlongan Castle. View from the South-East.

The two floors above need not be particularly described, as they are similar to the hall, with deeply recessed windows, mural chambers, etc., and will be easily understood from the plans. We may however refer to the two mural chambers or cupboards side by side in the south wall. They are continued up in the wall, till lost in darkness, as a gradually narrowing flue. The roof of the castle, a comparatively new one, covers in the space above; and if there was a chimney-stack it has been removed. The whole arrangement naturally suggests a fireplace which has been altered. The doors have all the appearance of being original.

It should however be noted that there is no upper hall in this castle, such as there usually is in such buildings. Possibly the above aperture was at first intended for the fireplace of an upper hall, but the builder having changed his mind during the construction of the building, had the hall divided into two rooms, each with a separate fireplace, and caused the large fireplace to be converted into two cupboards, as we now see them. The fireplace at the east end of the second floor, already referred to, has a bead and hollow moulding round the jambs and lintel, and (what is unusual) the same moulding is continued along the edge of the hearth as well, so that it has the appearance of a moulded picture frame. The beams and joisting of the upper floors still partly remain, and are indicated on the plan.

The battlements of Comlongan are most interesting. The staircase is continued up as a watch turret (on the right, Fig. 199), reached by a stone stair following the slope of the roof behind the turret, and continued up a few steps higher (see Plan of Watch-towers). Another watch-tower, with chimney flues in the parapets, is attached to the cape house in the centre of the view (Fig. 199), and rises above it. At each of the corners of the battlements at the east end (Fig. 199) there is a roofed cape house, with an open battlemented parapet between, while the whole length of the parapet at the west end is roofed in, forming a long gallery with a fireplace, and lighted with the embrasures converted into windows (Fig. 196). One cannot be certain whether this gallery is original or not, there being features which tell both for and against that supposition ; but at all events it is not of recent construction.

The castle of Comlongan was built by the Murrays of Cockpool, whose original residence was the castle of Cockpool, the ruins of which are still traceable within a short distance of Comlongan. Their original charter was granted by Thomas Randolph, Earl of Moray, to his nephew, William de Moravia, in the fourteenth century. The castle still belongs to the same family, being now the property of the Earl of Mansfield.

CARDONESS CASTLE, Kirkcudbrightshire.

Cardoness Castle is situated on the Fleet, a small stream which empties into Wigtown Bay about one mile farther down. The castle (Fig. 200) occupies the summit of a thickly wooded ridge rising up from the right bank of the Fleet. The ground slopes rapidly all round, there being only a narrow level strip adjoining the walls. Although it is a building of small size, it has a most imposing appearance as seen by the traveller approaching from the bay, and a closer inspection shows it to be a very fine keep, only wanting a roof to render it practically entire. It would be well worthy of the small expense of roofing, as it is a very interesting building of its class, of excellent masonry and workmanship, and ingeniously planned

arrangements. In the latter respect it recalls the plans of Elphinstone and Comlongan Towers. The castle is oblong in plan, measuring over the walls 42 feet 11 inches by 31 feet 11 inches (Fig. 201). It is 53 feet high to the top of the walls, and 71 feet to the top of the gables. The basement has a vault 15 feet 3 inches high, containing an intermediate floor. The upper floors, which were of wood, are all gone (see Section).

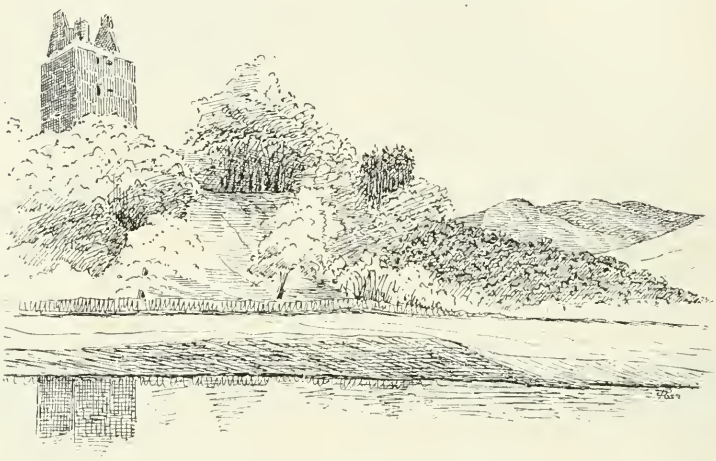


Fig. 200.—Cardoness Castle. General View.

The entrance door is in the side wall (see Plan of Ground Floor), with a slot-hole for the bar behind the door, and leads into a passage in the thickness of the wall, entering from which on the left hand is a small mural guard-room, and on the right hand is the wheel stair, which goes to the top and the intermediate floors. In front are two doors leading to the two chambers into which the under vault was divided. The larger of these, lighted by two narrow slits, contains two singular round recesses at the angles of the main walls, with massive diagonal sills about 3 feet 6 inches above the floor.

This peculiar shape makes their purpose somewhat obscure. Probably these circular recesses were formed as a kind of inner turret, to enable the loopholes to be used for defensive purposes. Entering off the stair, at about the level of the upper room or entresol in the vault, are two mural chambers (see Plan of Entresol). One of these extends over the entrance lobby, and has a trap down to it, useful both for defence and for hauling up goods; the other, in the end wall, enters off the passage to the entresol. It has been an upper prison or guard-room, with a garde-robe, and has a trap down to a dark dungeon beneath.

The view of the hall (Fig. 202) is very striking in its ruined state, with the bold arch thrown from wall to wall for supporting an upper partition which divides the top floor into two rooms. The hall is lighted

with two seated windows, and two others kept at a high level in order to admit of the mural chambers above described below them (see Section). The mural chamber off the side seated window is in a similar manner kept at a high level, so as to allow the mural chamber over the entrance passage to have suitable head-room. Two other small chambers

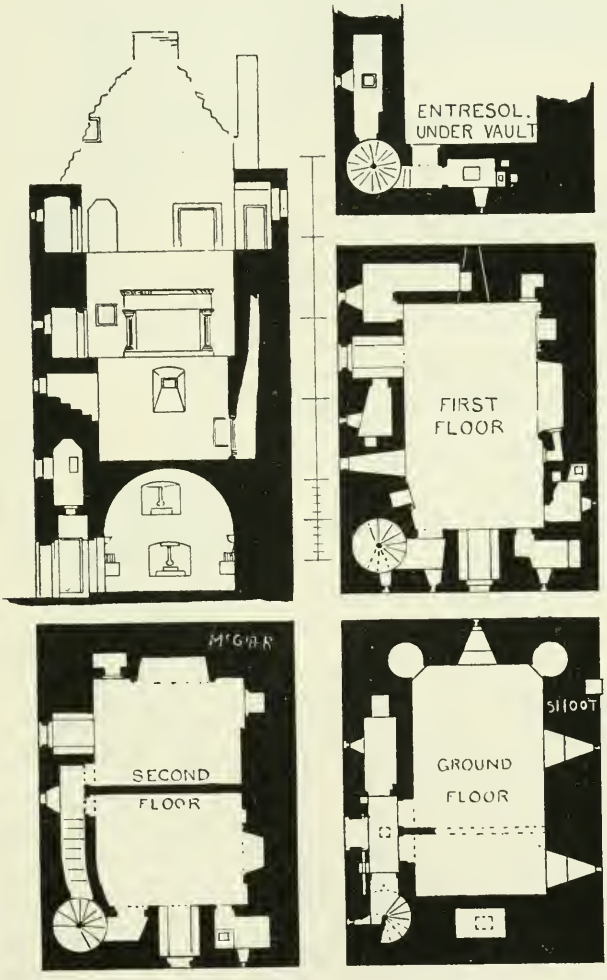


Fig. 201.—Cardoness Castle. Plans and Section.

enter off the hall, each having a garde-robe. The fireplaces of the hall and the upper hall (both seen on the sketch, Fig. 202) are good examples of the fifteenth-century type so common in Scotland, but they are above the average in design and workmanship. Unfortunately

both are in a slightly ruinous state, but are well worthy of having means taken to preserve them. As will be seen on the plan of the hall, there is a curious opening from the ingoing of the fireplace, about 12 inches

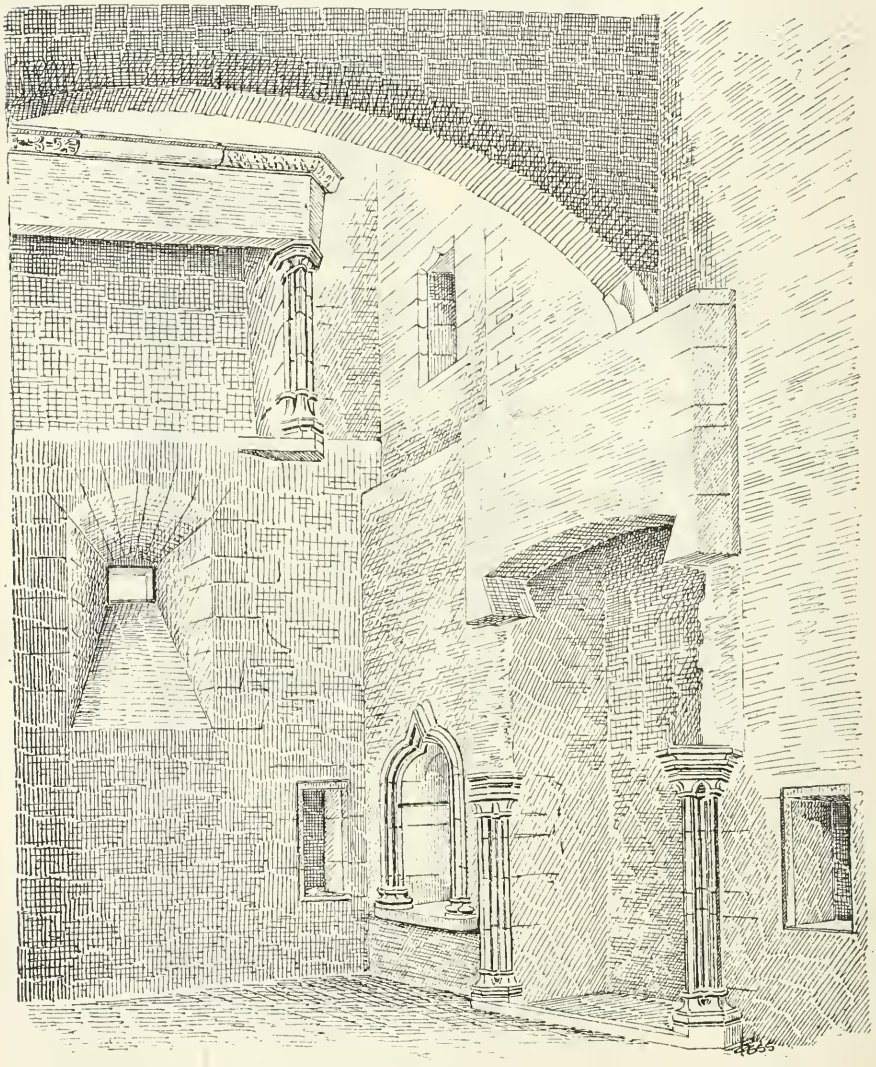


Fig. 202.—Cardoness Castle. Interior of Hall.

square, which turns at right angles and opens into the hall, somewhat like a similar opening seen at Gylem.

The upper floors, as already mentioned, are each divided into two

apartments. These do not enter one off the other as usual, the one farthest from the stair being reached by a mural passage, as shown on the plan of the second floor.

Cardoness belonged to the MacCullochs, a family of old standing in Galloway, and it is generally supposed that the castle is of about the same date as Threave, but its details show it to be of a later period, probably the end of the fifteenth century.

NEWARK CASTLE, Selkirkshire.

This interesting old keep, so full of historical and romantic associations, is situated on the top of a steep wooded bank rising above the

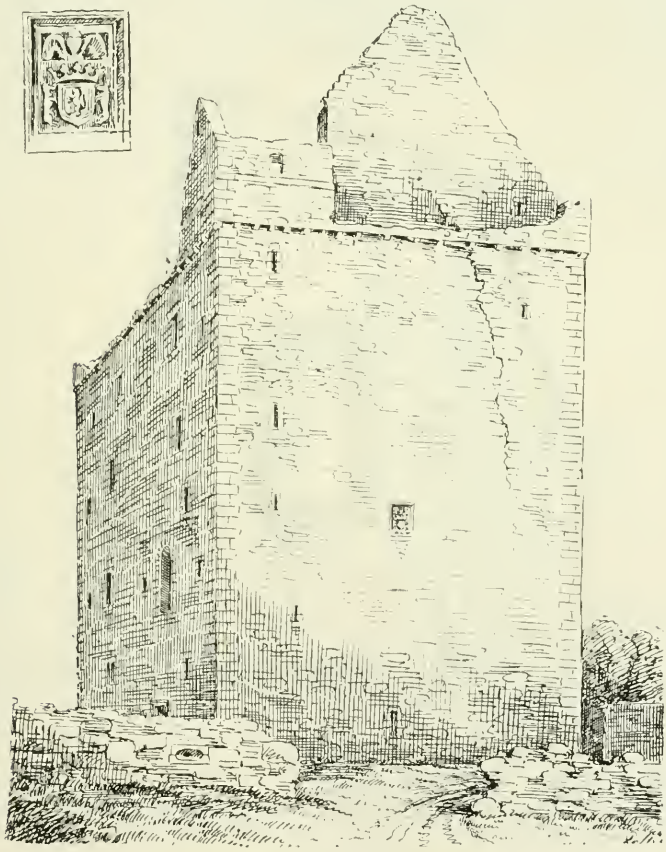


Fig. 203.—Newark Castle. View from the North-West.

river Yarrow, about 4½ miles up from the town of Selkirk. Mr. Fraser, in his work on the *Scotts of Buccleuch*, states that in a charter of

Archibald, Earl of Douglas, dated 1423, it is called the "new Werk," in distinction from an older castle which has now disappeared. It may therefore be regarded as belonging to the beginning of the fifteenth century. Newark was the Royal hunting-seat in the forest of Ettrick, and bears the Royal arms on the shield in the west gable, of which an enlarged sketch is given (Fig. 203). It was attacked and taken by the English in 1548. In 1645 one hundred prisoners taken on the field of Philiphaugh, which lies within a few miles of it, were shot in the court-yard, and in 1650 it was occupied by Cromwell's troops. The Barons of Buccleuch were the Captains of Newark from an early date. Anna, the Duchess of Monmouth and Buccleuch, and wife of the famous Duke of Monmouth, who was beheaded under James VII., resided here after his death, and it is during her time that Scott here introduces the "last Minstrel," and makes him sing his mournful lay.

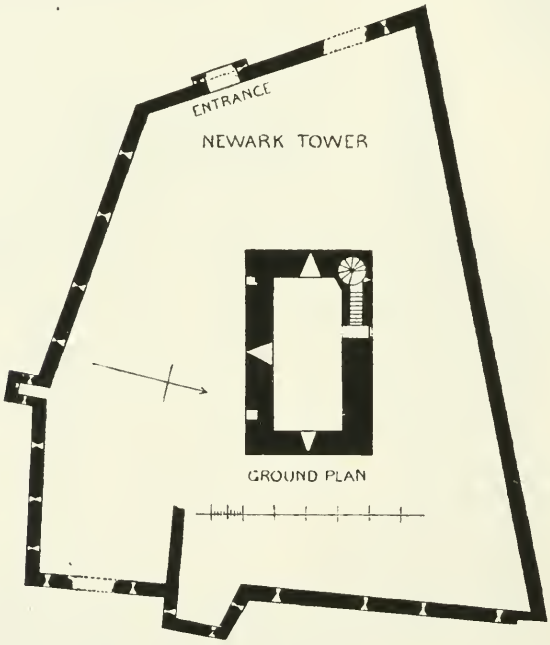


FIG. 204.—Newark Castle. Plan of Ground Floor.

Newark is a massive oblong keep (Fig. 204), 65 feet by 40 feet, with walls 10 feet in thickness. The basement is vaulted, and sufficiently high to contain the usual loft in the vault. Above this there are four stories, which had wooden floors, now entirely gone. The original entrance was on the first floor; the doorway still remains above the present modern entrance on the ground floor (Fig. 203), where, however,

there may have originally been a door giving access to the basement. The internal communication between the first floor and the basement is by a staircase in the north-west angle of the walls, partly circular and partly straight. The first floor (Fig. 205) contains the hall at the east end, and the kitchen at the west end. The latter had a separate entrance from the newel stair, and seems to have been divided from the hall by a partition, indicated by dotted lines, as at Elphinstone Castle. It has a great fireplace, with seat and cupboard at one end, and two mural closets. The hall was lighted with two large windows to the south, set in deeply recessed square bays.

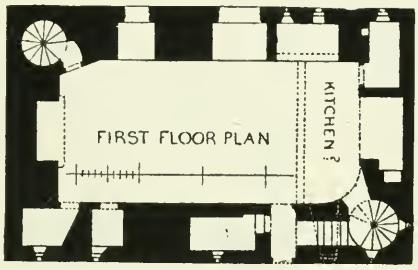


Fig. 205.—Newark Castle. Plan of First Floor.

The north wall contained within its thickness a small guard-room adjoining the entrance to the keep and the staircase, and two other mural chambers. A second newel staircase in the south-east angle of

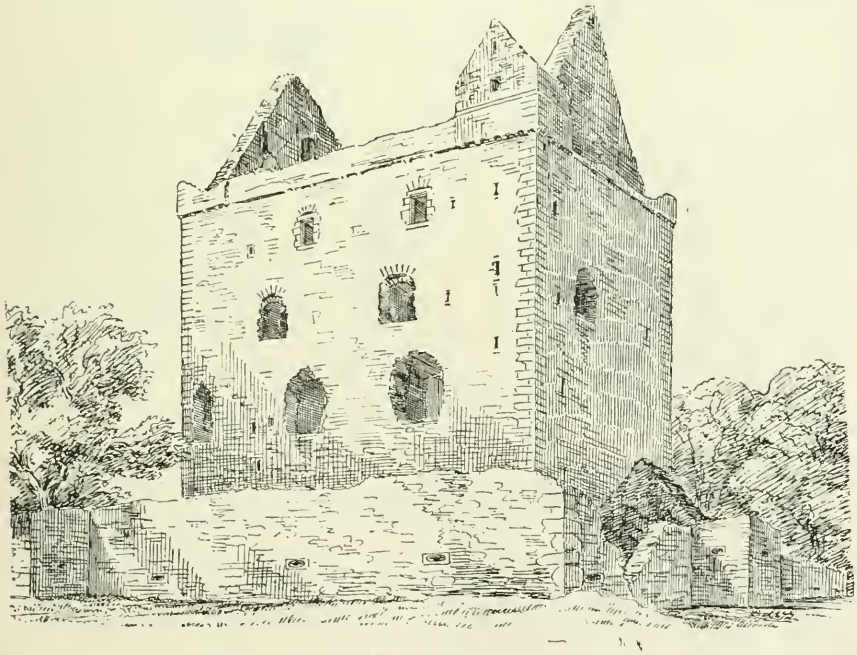


Fig. 206.—Newark Castle. View from the South-East.

the walls, together with that in the north-west angle, gave access to the upper floors. These are now inaccessible, but evidently contained the

usual kind of accommodation, which in this case must have been extensive. The top story, of course, comprised the parapet for defence (Fig. 206). The corbel table is rudely executed, probably owing to the scarcity of freestone in the district, while the angle turrets, instead of being round and projecting on well-carved corbel courses, and being finished with conical-pointed roofs, are square, and carried up as gabled cape houses.

It seems most likely that here, as at Comlongan Castle, the top story had originally a simple parapet carried all round the building, and that the gabled angle turrets were added at a later period. A very distinct instance of this process may be seen at Benholm Tower, Forfarshire.

The walls of the barmkin still remain to a considerable extent. They are of later date than the keep, and are pierced with shot-holes (Figs. 204 and 206). The position of the original entrance gateway can also be traced. One of the drives through the fine grounds of Bowhill, one of the seats of the Duke of Buccleuch, passes through the barmkin by means of two apertures in the walls. The freestone dressings of the windows have been at some period rudely torn out, but it is delightful to find that what still remains of this historic pile is carefully guarded and preserved from further ruin.

AFFLECK or AUCHENLECK CASTLE, Forfarshire.

This highly interesting castle is situated in the parish of Monikie, in Forfarshire. The building is in perfect preservation, but it is uninhabited. It is of the common oblong keep form on plan (Fig. 207), with a slight projection at the south-east corner for the staircase, and measures over the walls 37 feet 6 inches by 26 feet 7 inches. This projection shows one of the small modifications of the simple keep plan which were now being introduced. The height to the top of the parapet is 51 feet 6 inches, and 8 feet more to the ridge of the roof. It contains five floors (see Section), the vault under the floor of the hall, which is about 20 feet high, comprising two of them. The arched entrance doorway (Fig. 208) is in the re-entering angle, with its iron yett still hanging behind the wooden door.

The ground floor, which is down a few steps from the entrance, is divided into two apartments. The upper floors, each in a single apartment, measure 26 feet 8 inches by 16 feet 2 inches. The first, which is the only vaulted one, has no fireplace, but the window recesses are provided with stone seats. The staircase, which commences at the entrance passage, ends on the second floor at the hall, which is 14 feet 5 inches high, and has three windows, a large fireplace at the north end, a garderobe near the door, and wall closets. In the thickness of the east wall a stair of eleven steps, 2 feet 9 inches wide, leads up to an entresol over the principal staircase (see Plan of Entresol) measuring 7 feet 8 inches

by 7 feet, lighted by two small windows. This was evidently a private room or bedroom. Off this, up two steps, is a garde-robe, lighted from the outside, and having a small spy-window into the hall, as seen on the section. We have several examples of these windows, as at Liberton, Elphinstone, and elsewhere, and in all cases they were doubtless for the use of the lord or lady of the house, to enable them unseen to overlook what was going on in the hall. Every person going to the upper floors

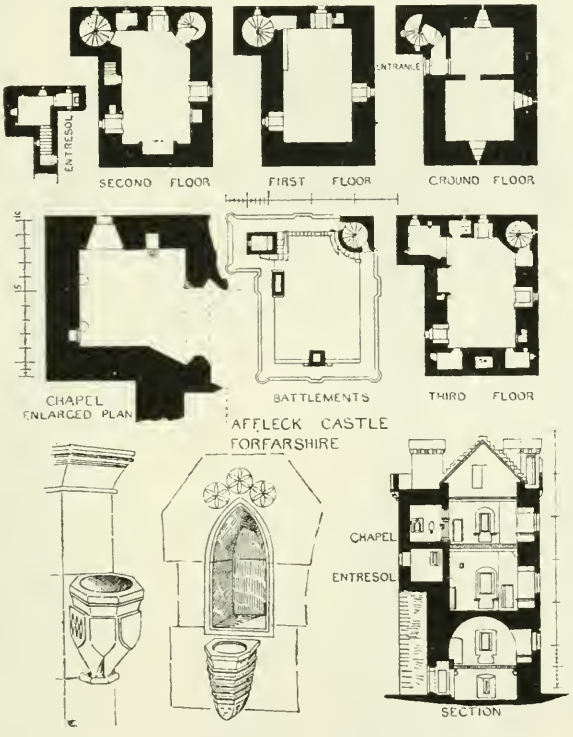


Fig. 207.—Affleck Castle. Plans, Section, and Details.

must of necessity go through the hall and pass under this window, so as to reach the other stair, which begins on this level at the opposite side of the hall, and leads to the top. The floor above this has been the withdrawing-room. It is similar in arrangement to the hall, only that its fireplace is in the east wall. Opening off this apartment, up one step, there is a beautiful little chapel or oratory (see enlarged Plan, Fig. 207, and view, Fig. 209), entering through a round arch 4 feet 9 inches wide. The chapel, which has a circular vault, measures 7 feet 5 inches by 6 feet 10 inches, and is 8 feet 6 inches high, and is lighted by a small cusped window on the west side. On the wide splayed jamb of the

entrance there is a stoup for holy water (see Fig. 207) corbelled out from the jamb, with three shields on the fully-relieved sides, on one of which are three lozenges. On the wall alongside the window there is a piscina (Fig. 207) with pointed ambry and three dedication crosses over. Against the east wall there are two corbels moulded in the same manner as the piscina, evidently meant for supporting candles, the altar space being between the corbels. There is also an ambry in this wall.

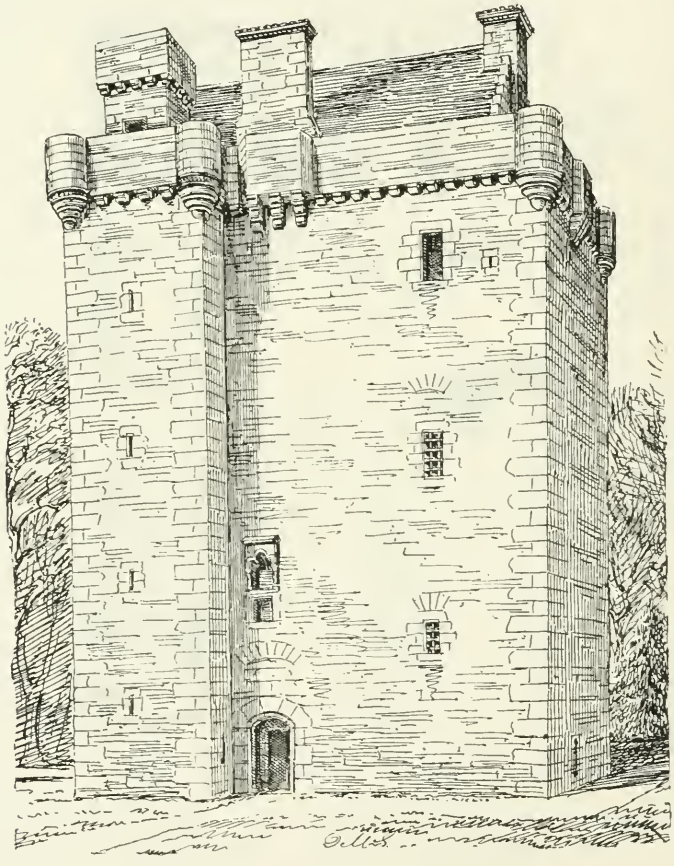


Fig. 208.—Affleck Castle. View from the North-East.

The entrance to the chapel seems to have been guarded by a low railing, as in the faces of the jambs there is a groove for a rail sliding into, as will be seen in the view of the chapel.

On the battlements are two cape houses or watch turrets, one over the upper staircase and another over the chapel (Figs. 208 and 210). The parapets with their corbels, without machicolations, and the watch turrets and chimneys, are all in good preservation. The parapets, how-

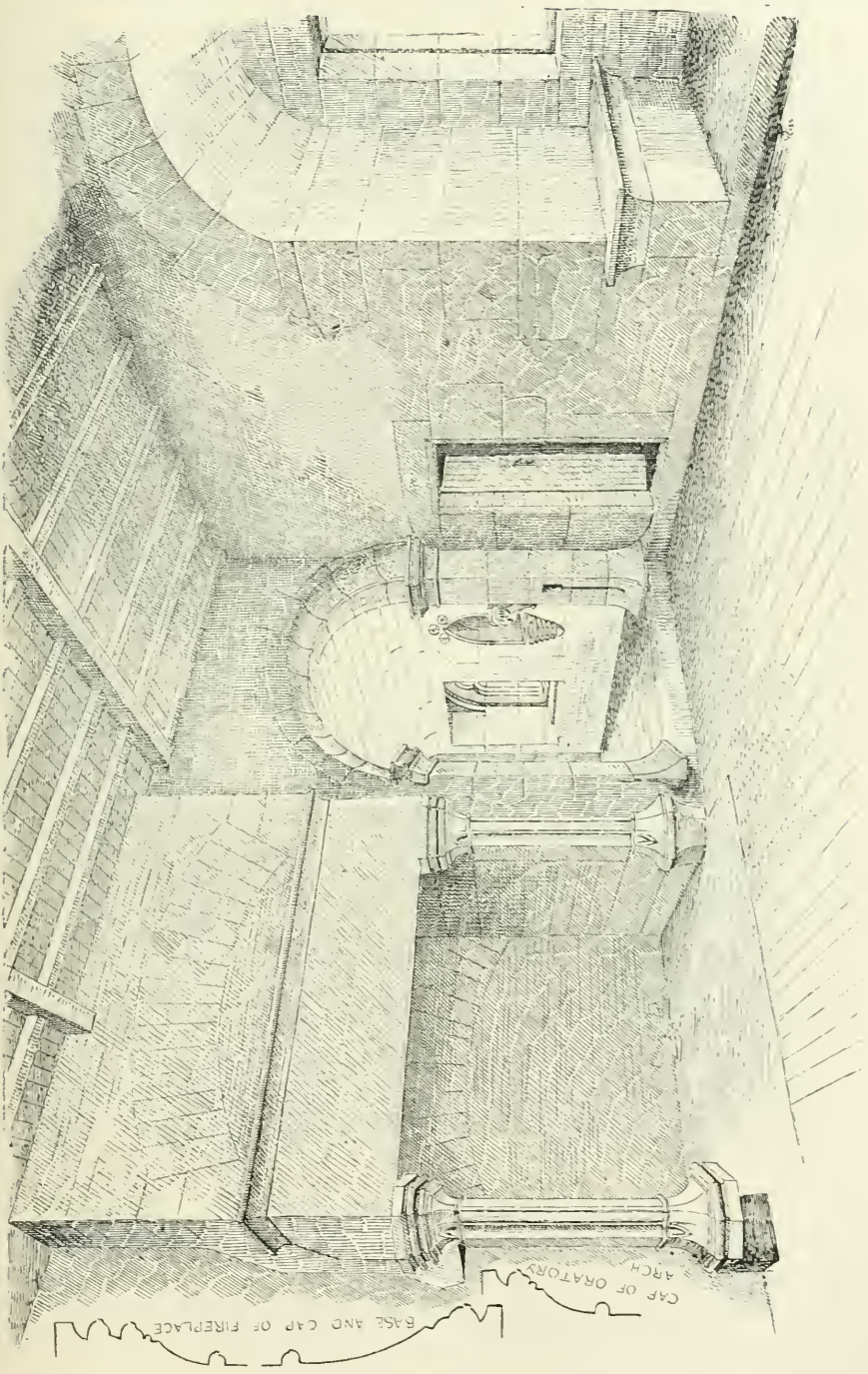


FIG. 201.—Affleck Castle. Interior of Hall.

ever, appear to have been restored. They would no doubt originally be provided with embrasures, as at Balvaird, and the projecting bartizan over the entrance door would certainly be originally furnished with machicolations. The workmanship at Affleck is of the best kind, the details, although simple, being well wrought out. In particular, there is a completeness about the little oratory which makes it almost without a parallel in Scotland.

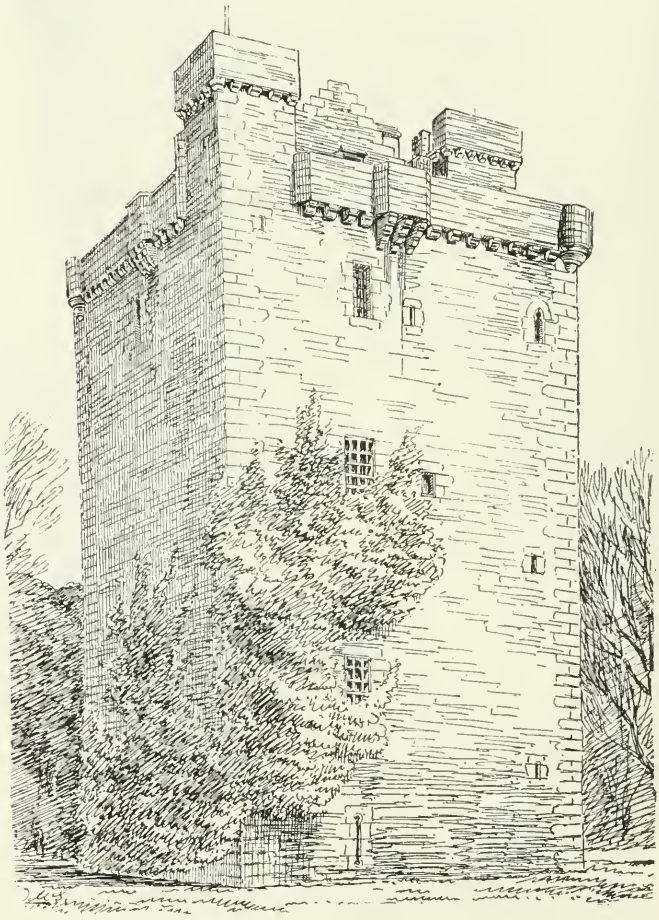


Fig. 210.—Affleck Castle. View from the South-West.

The Auchenleck family are said to have possessed this estate from very early times, and in the reign of James I. they are designated as "Auchenlecks of that Ilk."

The castle evidently dates from about the end of the fifteenth century, and continued to be inhabited till the year 1760.

CRAIGNETHAN CASTLE, Lanarkshire.

This castle—now the property of the Earl of Home—is of peculiar interest, whether we regard its picturesque situation, the exceptionally good state of preservation of the enclosing walls and towers, or the romantic charm which has been imparted to its ruins as forming the prototype of Sir Walter's Tillietudlem. The approach to the castle from the Vale of Clyde at Crossford, about six miles below Lanark, lies for about a mile through the beautiful valley of the Nethan, with its precipitous and wooded banks.

The castle occupies the top of a lofty and rocky promontory formed by a sharp curve in the river, at the point where the narrow pass widens into an opener country to the south. The site is further isolated by a deep cleft on the north, through which a small burn flows. The road to the castle from the north crosses this stream by an old but substantial bridge. It then ascends the steep hill by zigzags, and, on reaching the level platform on which the castle stands, it seems formerly to have passed through a gateway with towers, which defended the access. Of this some slight remains may still be traced. From this point a view of the west or entrance front of the castle (Fig. 211) is obtained. This consists of a battlemented wall with a square tower at either extremity, and an arched gateway in the centre, all provided with horizontal embrasures near the ground for guns. The gateway leads into the outer courtyard (Fig. 212), 190 feet by 140 feet, which is surrounded with walls similar to the front enclosure on the north, west, and south sides, and by a dry ditch or moat 30 feet wide on the east, which divides it from the inner courtyard of the castle. The latter is 82 feet by 65 feet, and contains the central citadel or keep, which is in the form of a parallelogram 70 feet by 54 feet. This court has also been surrounded with high walls and towers, the tower at the south-east being of unusual size.

The oldest part of the castle is undoubtedly the keep. It is built on a plan very unusual in Scotland, being a simple parallelogram divided into a double keep by an internal wall running from east to west the whole length of the building. Another unusual circumstance is that the principal floor is in this case on the ground level, instead of being, according to the ordinary rule, on the first floor. But this may be explained by the fact that there is here a vaulted basement floor under the ground level.

The entrance door in the centre of the west front (Fig. 213) is arched in the usual manner, and is surmounted by a panel with a shield containing the Hamilton arms. It has been provided with double doors, and has a groove in the wall for the ordinary strong bar. This leads into an entrance lobby of unusually large dimensions, from which access was

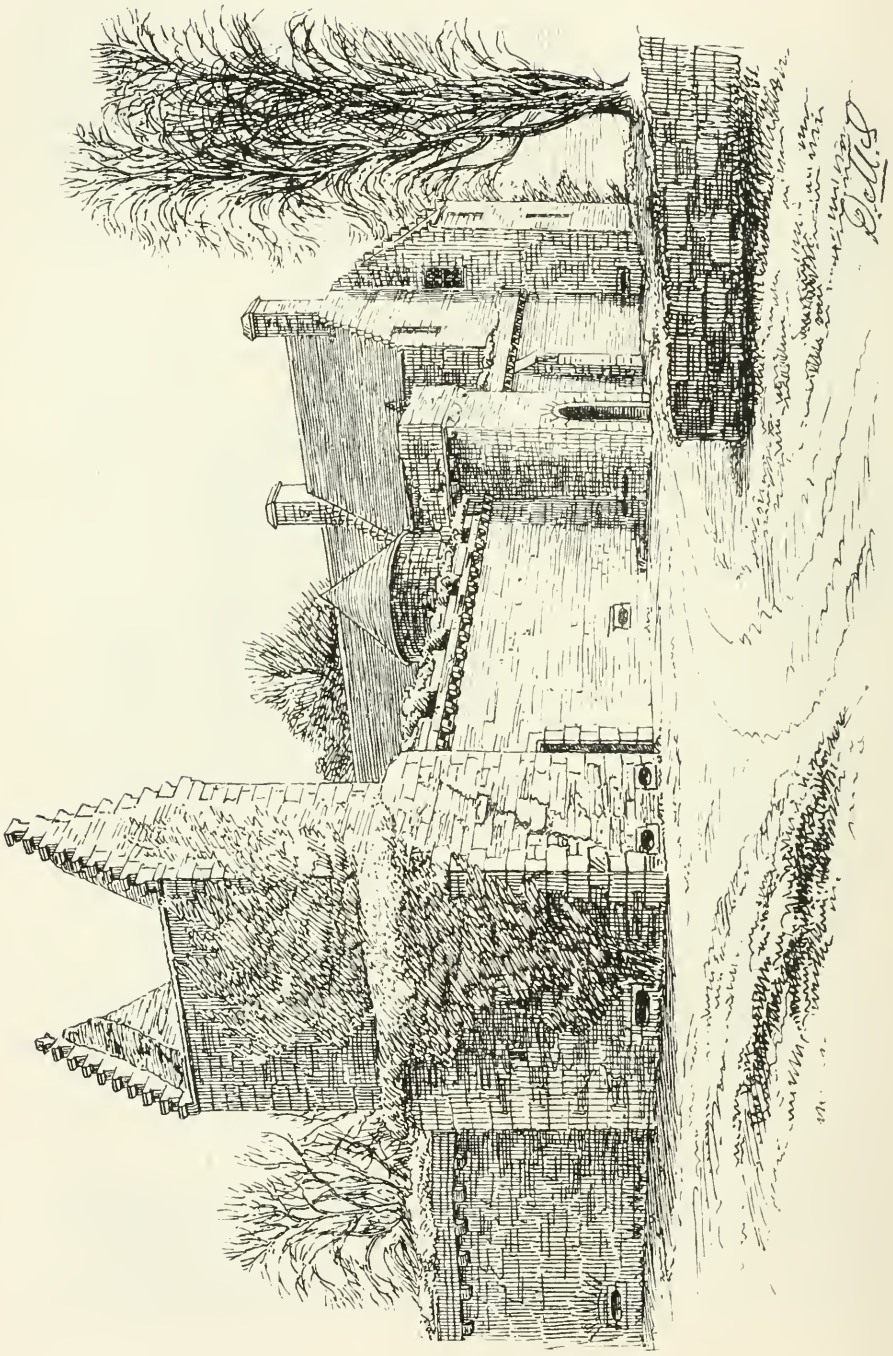


FIG. 211.—Craignethan Castle. View from the North-West.

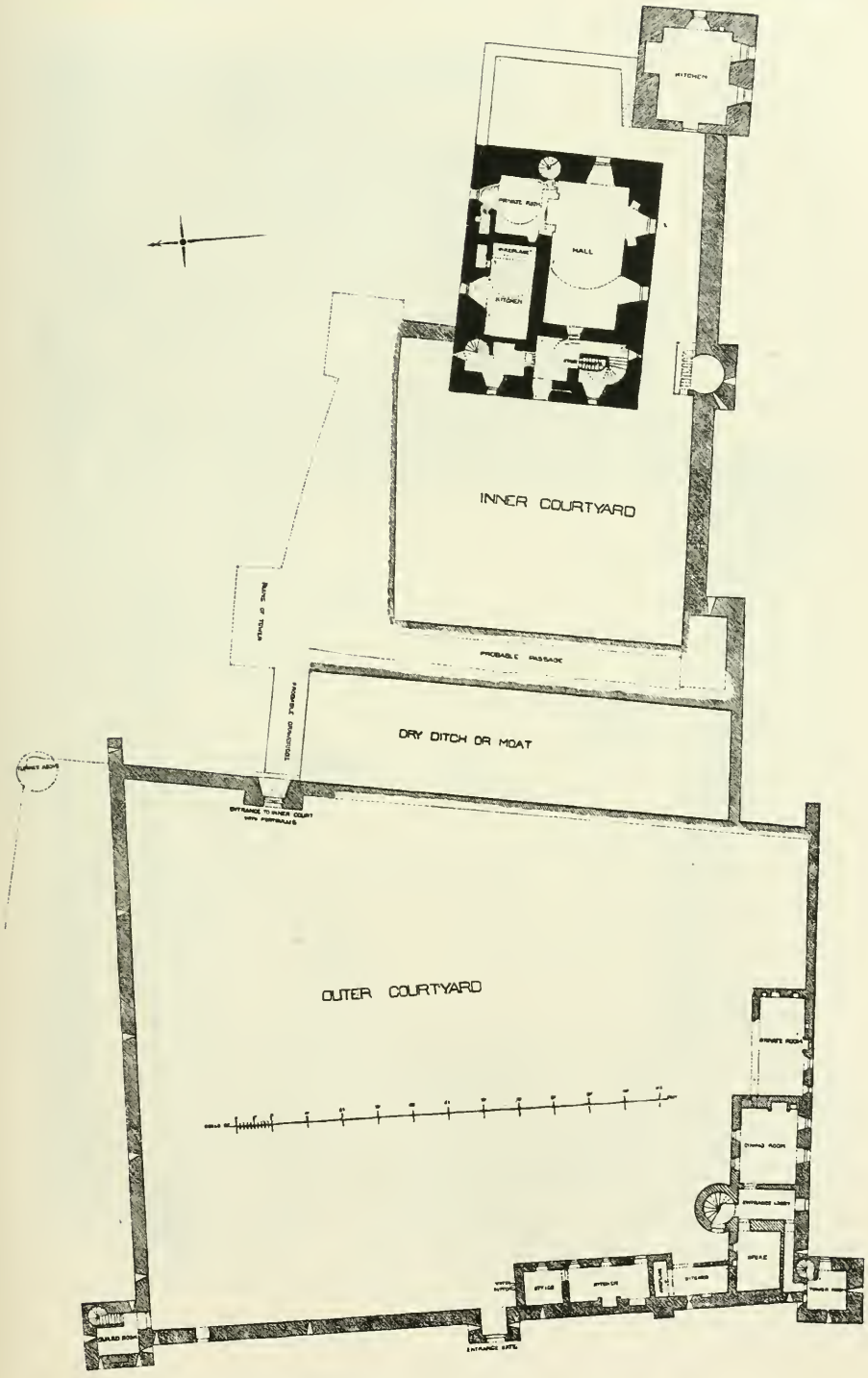


FIG. 212.—Craignethan Castle. Plan of Ground Floor.

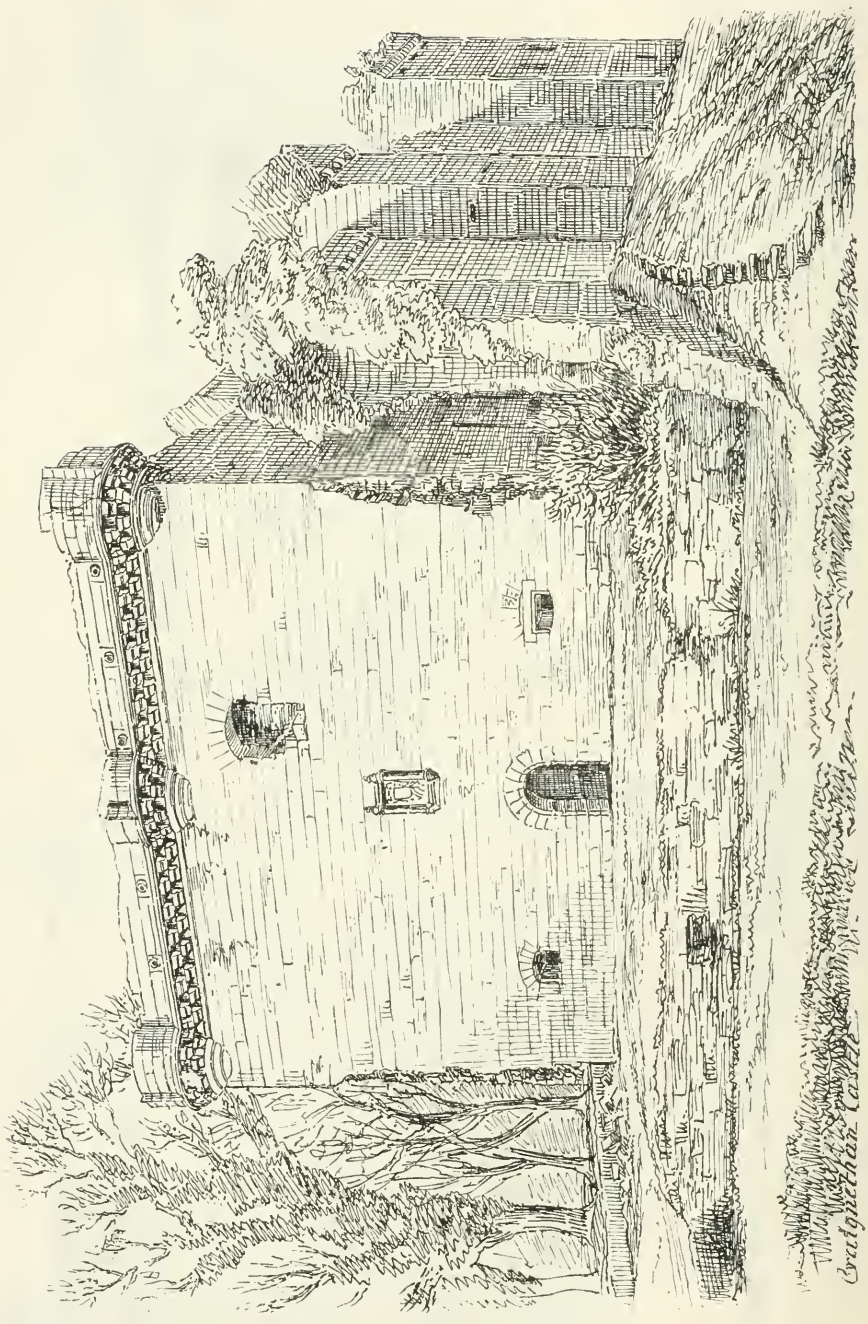


Fig. 213.—Craignethan Castle. West Front of Keep.

obtained to the wide principal staircase in the south-west angle, and also to a stair under the above leading to the vaults below. The great hall also enters from this lobby. The hall is 40 feet 3 inches by 20 feet 6 inches wide, and has a lofty semicircular vault well constructed with hewn freestone, now, unfortunately, in a very ruinous state. Two wide windows light the hall on the south side, and one at the east end. These and the other wall openings have bold rolls with raised fillet on the angles. The fireplace seems to have been in the central wall where now demolished. The private room, with fireplace and garde-robe, entered off the hall at the north-east angle, where there is also access to a private newel stair to the upper floors. To the north of the entrance lobby is a small apartment or guard-room (now partly filled up), from which there must have been originally a door to the kitchen, the great fireplace of which still remains. The newel stair from the guard-room to the roof would be used for manning the battlements.

The upper portion of the building is now a total ruin, and cannot be inspected with safety.

A vaulted basement extends under the whole of the keep, divided similarly to the principal floor. The cellar under the east end of the hall contains a circular-built well.

The keep has had battlements all round and probably a stone roof with open bartizans corbelled out at the angles (Fig. 213). There is also a projecting bartizan over the entrance door. The corbelling is of the same design as that of Edzell Castle, and shows the transition from the earlier massive corbelling with machicolations to the later style when the corbels were entirely ornamental. The corbels of the lower of the two rows have in this case nothing to support, and are used merely for ornament.

The bartizans have each a peculiar angle shaft on the outer face, which mitres into the string-course at bottom, and probably supported a shield with coat of arms or a crest or other ornament rising above the parapet. But of these finials no trace now remains.

Judging from the style of the building, this keep seems to belong to the latter half of the fifteenth century. It was no doubt originally surrounded with walls which extended as far as the present moat, and portions of which are probably incorporated in the existing walls of enceinte.

It is generally related that this castle was built by Sir James Hamilton of Finnart, who was Superintendent of Royal Palaces and Castles under James v. in the first half of the sixteenth century, but the keep is undoubtedly of older date. The lands of Draffane, the ancient name of Craignethan, were acquired by James, Lord Hamilton, in the middle of the fifteenth century, probably on the forfeiture of the Earl of Douglas in 1455. It was not till 1529 that these lands were settled by the first Earl of Arran, Lord Hamilton's successor, on his illegitimate

son, the foresaid James Hamilton of Finnart. He is generally believed to have been himself an architect (a view which his office of Superintendent of Royal Palaces seems to support), and to have designed and directed the works in the rebuilding of Draffane or Craignethan. To him are to be attributed the enclosing walls and towers round the keep, including the large south-east tower. He also appears to have created the outer courtyard and surrounded it with the walls and towers which still stand.

As originally built, the keep and surrounding wall were well detached by the moat or ditch from the adjoining land, but when the outer courtyard was added it became necessary, in order to obtain room for it, to place the west wall close to a high point of land, which greatly cramps the approach, and which completely overlooks the interior of the outer courtyard. This courtyard, although very ornamental, is thus but of small value in point of defence, and would never have been so constructed had not the previous existence of the keep and the nature of the site rendered it unavoidable. Hence also the great care which is bestowed on the defences of the inner courtyard. These consist in the first place of the moat, 30 feet wide and probably 12 feet deep, though now partly filled up. It is faced on each side with dressed walls, and so far as can now be ascertained, the only access from the outer to the inner courtyard was by a narrow gateway, 5 feet wide, provided with a portcullis, from which in all probability a drawbridge gave entrance to the tower (now in ruins) on the inner side of the moat. It will be observed that this gate is as wide as the entrance to the outer court. The intention evidently was not to make gateways suitable for wheeled conveyances, which could scarcely reach this lofty and inaccessible site, and were scarcely ever used in those days, but for foot-passengers or horses only.

The west side of the inner court has been defended with a very strong wall or rampart. The foundations, which are now only a few feet above the level of the inner courtyard, are fully 16 feet wide. This thickness probably contained a wall on each side with a vaulted passage between, and was made of this great width in order to receive heavier artillery on the summit. The guns were probably mounted in upper vaulted chambers in the thickness of the wall, and provided with horizontal loops similar to those of the south-east tower (to be noticed immediately), or there may have been two tiers of guns, one over the other, and an open battlement above.

The enclosing walls on the north and east sides are greatly ruined, but that on the south side is still in fair preservation. It is strengthened with a square tower adjoining the moat, and another in the centre, both provided with horizontal embrasures for guns.

The south-east tower (Fig. 214) is of unusual size, being 34 feet by 31 feet 9 inches externally, and is three stories in height. The base-

ment floor is on the level of the ground outside, while the first floor is on the level of the ground inside the walls.

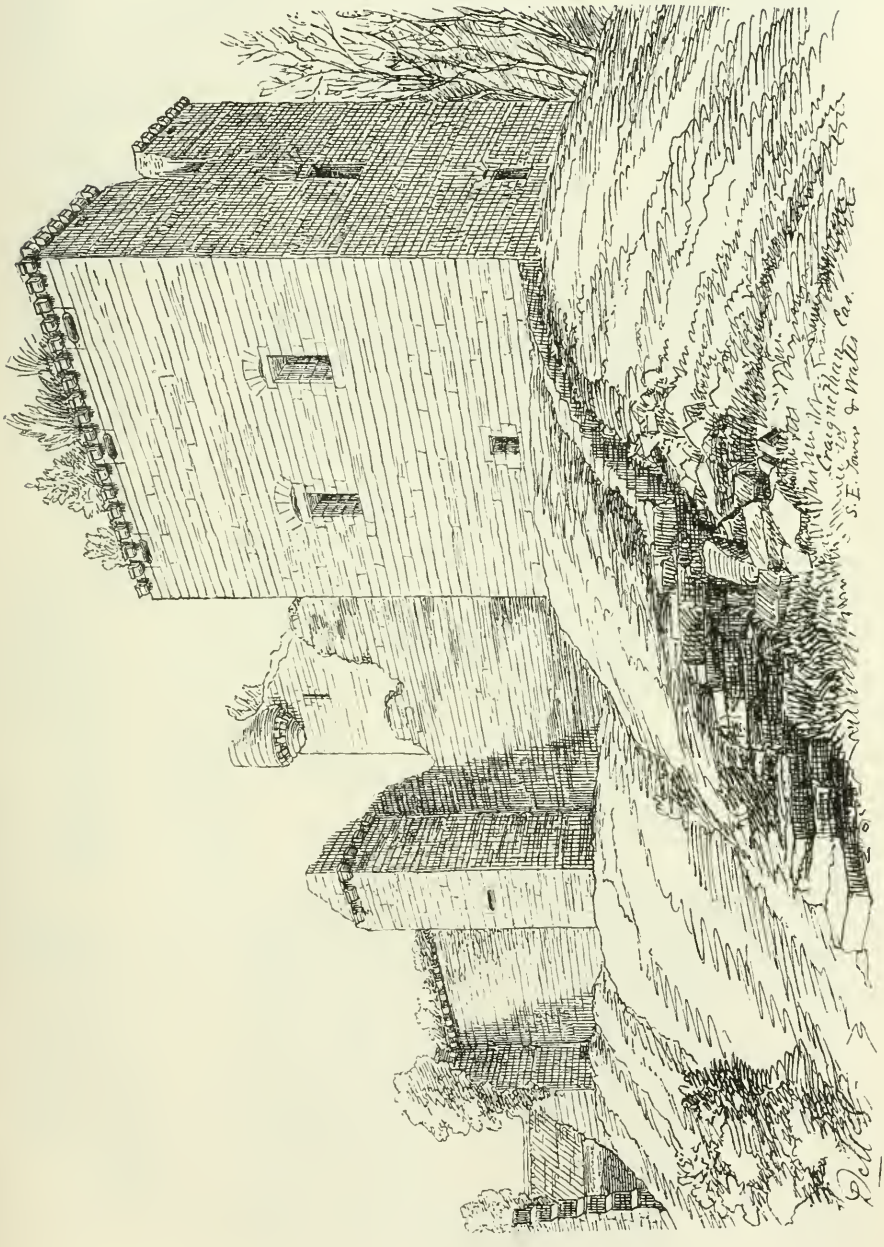


FIG. 214.—Craignethan Castle, South-East Tower and Walls.

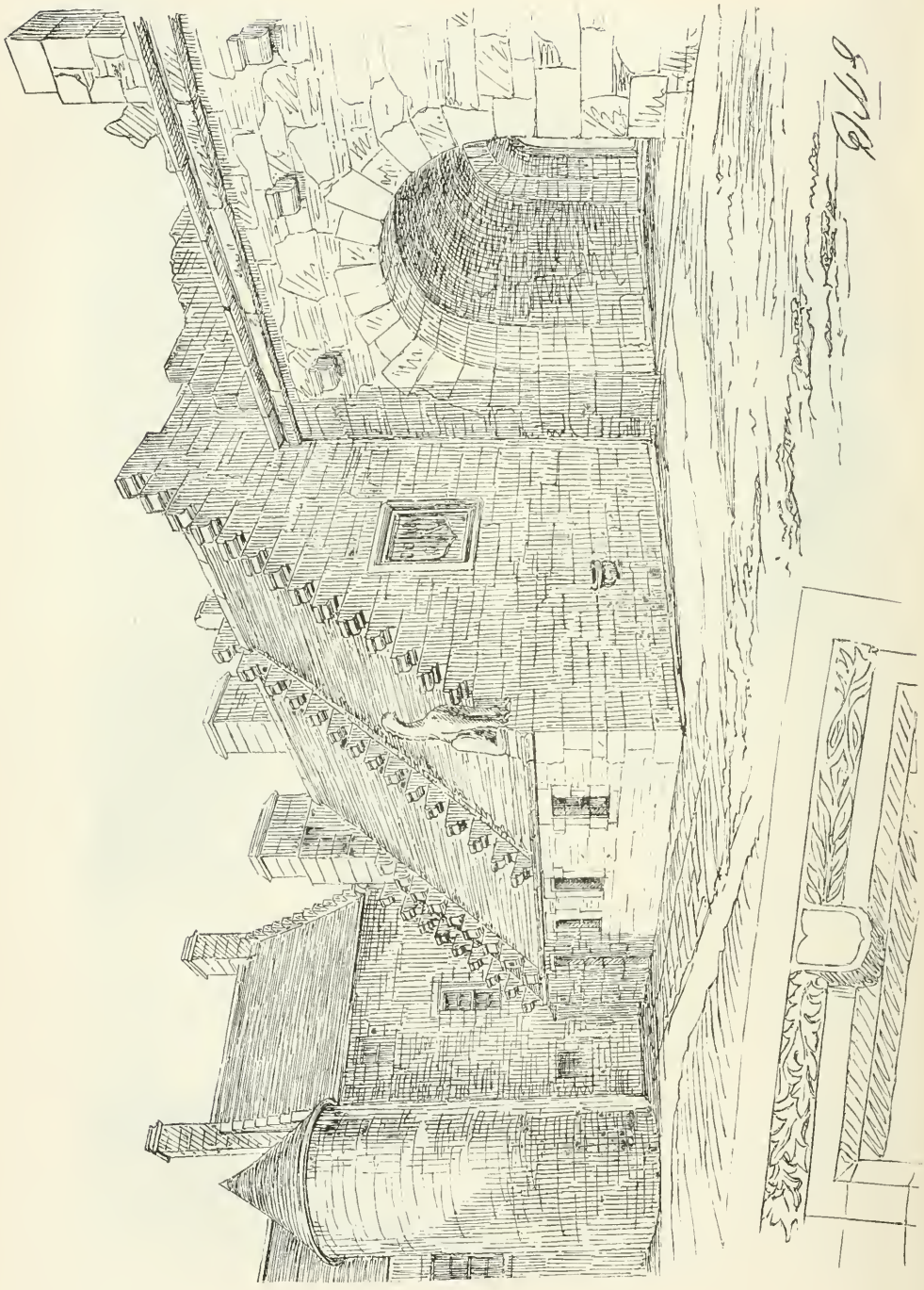


Fig. 215.—Craignethan Castle. Gateway and Buildings at West Wall; and Lintel of Kitchen Doorway.

The adjoining courtyard to the east of the keep is also brought to the upper level by a vaulted basement. These vaults enter from a small door in the south wall leading to a passage from which the doors of the vaults open. This passage may also have had communication with the vaults under the keep.

The first floor of the south-east tower contains a kitchen 26 feet 3 inches by 19 feet 3 inches, with a lofty vault built with well-dressed freestone. It enters from the courtyard, and has three large windows in the outer walls, which are 6 feet 6 inches thick. From chases which remain in the walls there would appear to have been some elaborate apparatus for roasting animals whole in front of the great fireplace.

The upper floor (over the vault) has been mounted with cannons (Fig. 214), for which horizontal embrasures are provided in the south and east walls, immediately under the corbels of the parapet. Embrasures of this description are very uncommon at this height, being generally situated on the ground floor. In this case they are sloped downwards so as to command the very steep banks which descend from the castle to the river. Access to this top floor and the battlements was obtained by an external stair on the north side of the tower, now demolished.

The outer court lying to the west of the moat, being overlooked from the adjoining ground, was not so carefully fortified as the inner court, but it was surrounded with a substantial wall 3 feet 6 inches thick, provided with embrasures for guns at the ground level, and with a continuous battlemented parapet on top.

The west front (Fig. 211), being the most exposed, is strengthened with towers at the angles, and the central gateway is also defended by a tower.

The angle towers formed guard-rooms, and each had a stair leading to the battlements. The north-west tower (Fig. 211) has the upper story fitted up as a pigeon-house; the upper wall is thinned off so that a passage for the parapet walk round the outside may be obtained. All round the interior of the walls, at the level of the parapet walk, there is a row of corbels to carry a wall plate. This may either have served to receive the ends of the rafters of the roofs of stables and other

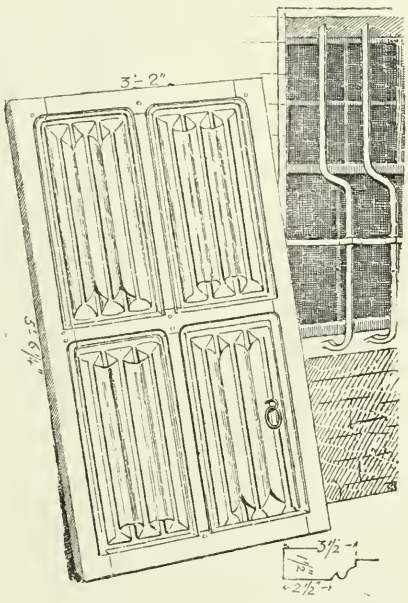


Fig. 216.—Craignethan Castle. Old Oak Door.

offices placed against the walls (similar to those adjoining the gateway, Fig. 215), or they may have been for supporting a wooden platform for widening the parapet walk and rendering it more serviceable in case of a siege. The north and south walls are terminated at the moat with large buttresses (Fig. 214), that of the north wall being pierced with a gun embrasure near the base. There was also an outer wall northward from the north wall of enceinte connected with which the remains of a turret are traceable at the north-east angle. The lean-to buildings

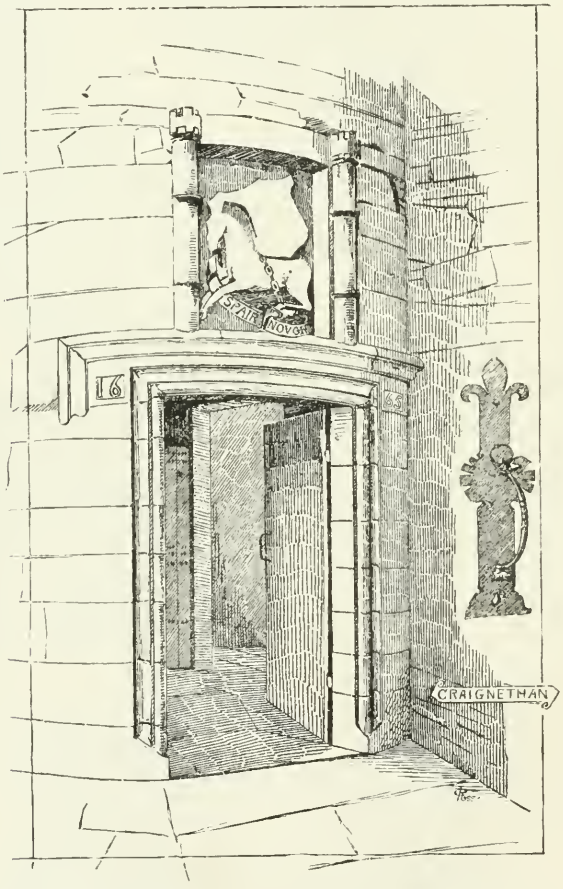


Fig. 217.—Craignethan Castle. Doorway of House at South-West Angle of Courtyard.

against the west wall (Fig. 215) are apparently of the same date as the walls, and seem to have been kitchen offices, one of them having a large fireplace. The lintel over the door has a carved ornament (Fig. 215), and the crow-steps are of an unusually ornate design. This kitchen was probably used in connection with the accommodation for retainers, which

may have been erected in the south-west angle, where a more modern house now stands. Exterior kitchens in courtyards are not infrequent in later castles. The crow-steps on the pigeon-house tower are of the same form as those on the kitchen buildings in the courtyard.

The gable of these buildings next the entrance archway (Fig. 215) contains a panel and shield with the arms of James Hamilton of Finnart, and beneath it a stone stoup, which was probably used for conveying water into the kitchen from the adjoining well. An old oak door is preserved in the new house, which is apparently of the date of the older work (Fig. 216). It is ornamented with good specimens of the linen pattern, which are rather rare in Scotland.

The house in the south-west angle of the enclosure was erected by Andrew Hay, to whom the Duchess Ann sold the castle in 1665. The doorway in the round stair turret is surmounted with a panel (Fig. 217) containing the arms of Hay with the above date. In erecting this house the old walls and south-west tower have been made available, and have been incorporated in the new building. The outside kitchen is a peculiar feature in this structure. This building has been somewhat modernised, and is still inhabited, but all the remainder is more or less ruinous. It is sad to see the rapid dilapidation which is overtaking the keep and other portions of this most interesting and historic building. Only quite recently the north-west angle bartizan of the keep, a large part of the vaulting, and some of the stairs fell, and unless some attention is paid to it, the whole of the castle will soon become a shapeless ruin.

SAUCHIE TOWER, Clackmannanshire.

Old Sauchie Tower, not far from Alva, in Clackmannanshire, is a well-preserved specimen of about the middle of the fifteenth century. Externally it is a simple parallelogram (Fig. 218) 38 feet by 34 feet, with walls about 6 feet thick. The entrance door, which is in the west wall, is on the ground floor, and communicates with all the upper floors by a circular staircase in the north-west angle of the walls. Adjoining the entrance there is a small recess for the guard. As usual, the ground floor is vaulted, but what is not common, is that the upper chamber in the vault has been used as a hall or good apartment, having a large window at the south end, with stone seats in the recess (see Section). The ground floor has been a storeroom, with a draw-well in the south wall, and small cellar adjoining in the thickness of the west wall. This wall is made 11 feet thick, so as to contain small apartments on the ground floor, first floor, and second floor. On the entresol (as seen on the Entresol Plan and Section) this small apartment forms the kitchen, with a fireplace in the south wall *wider* than the room. The first floor contains the hall, 26 feet by 18 feet 6 inches, with a deeply recessed

window in the west wall provided with stone seats. A small apartment enters from the window recess, which was probably a private parlour; and it had a small window to overlook the hall and see all that went on there. This was a very common arrangement in the solars of English

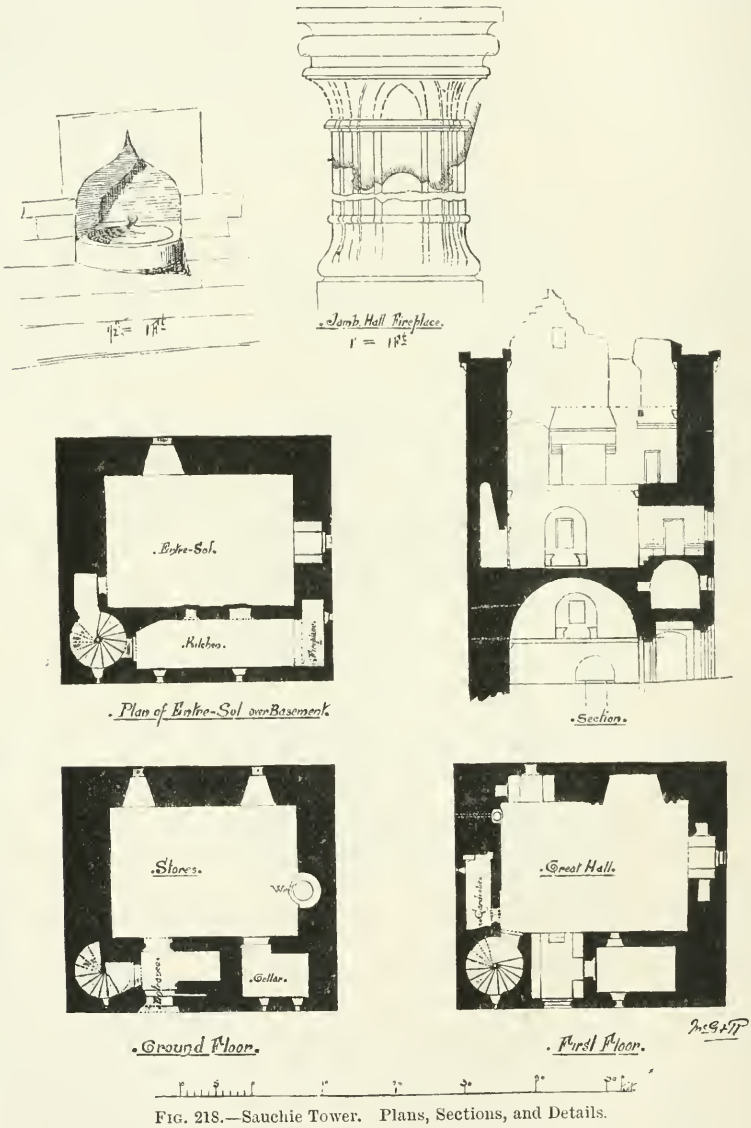


FIG. 218.—Sauchie Tower. Plans, Sections, and Details.

castles. The hall has a fine fireplace, 8 feet 6 inches wide, with good jamb mouldings (see sketch).

There appears to have been a small wooden screen at the door of the hall (to conceal the door to the garde-robe), but it did not form a screen across the whole hall, as in many of the larger castles, nor is there height for a gallery above it. There is, however, a stone basin (see sketch), with an ogee-shaped arch, and a drain to the outside, at this end of the hall, probably used as a wash-hand basin, as at Borthwick. It has a plain ogee arch over the recess for the basin.

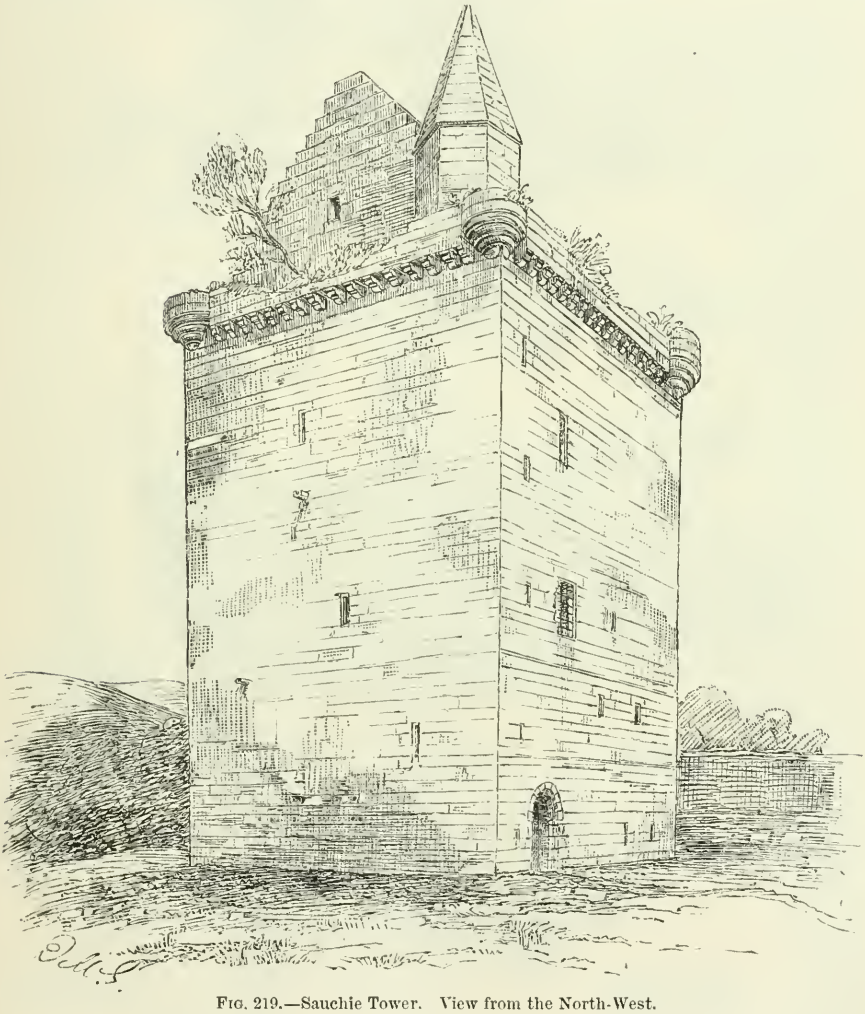


Fig. 219.—Sauchie Tower. View from the North-West.

The second floor is increased in size by thinning the west wall (see Section). This was the proprietor's private apartment. Some of the oak beams over this floor, and the hall floor, as well as the ground floor, still

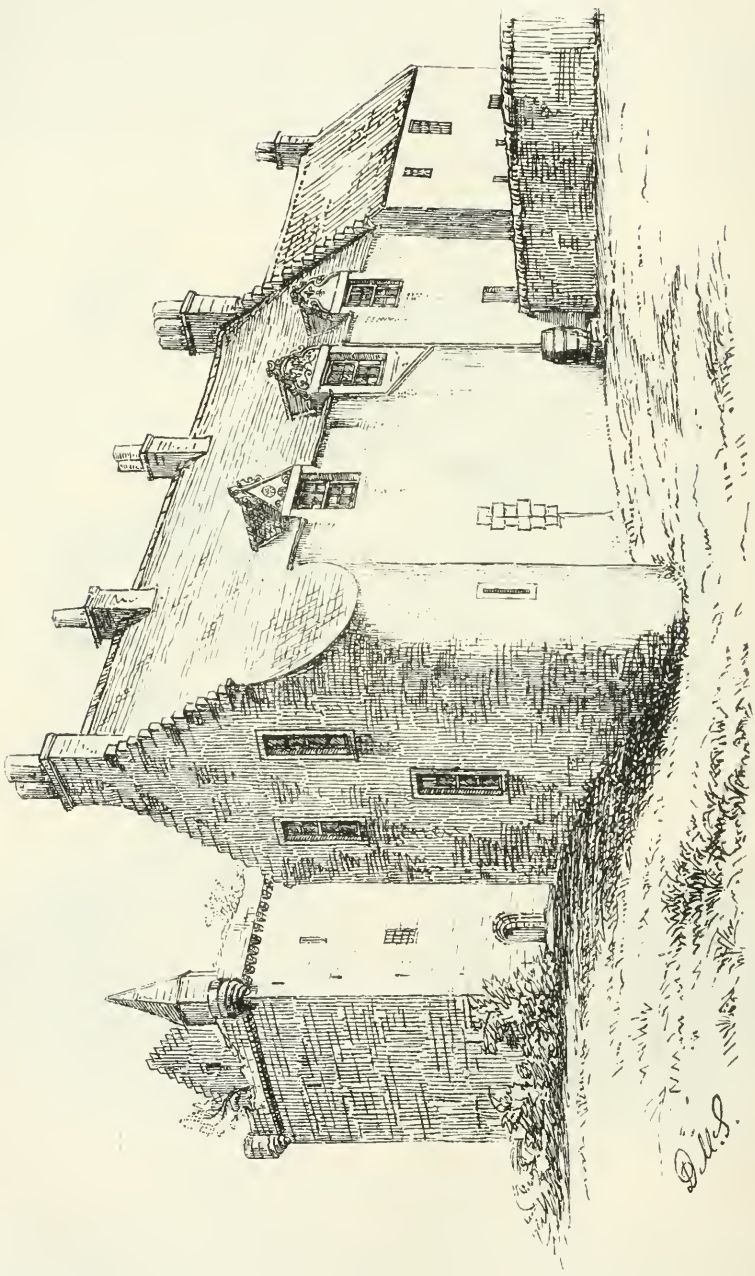


Fig. 220.—Sauchie Tower. House on Wall of Enceinte.

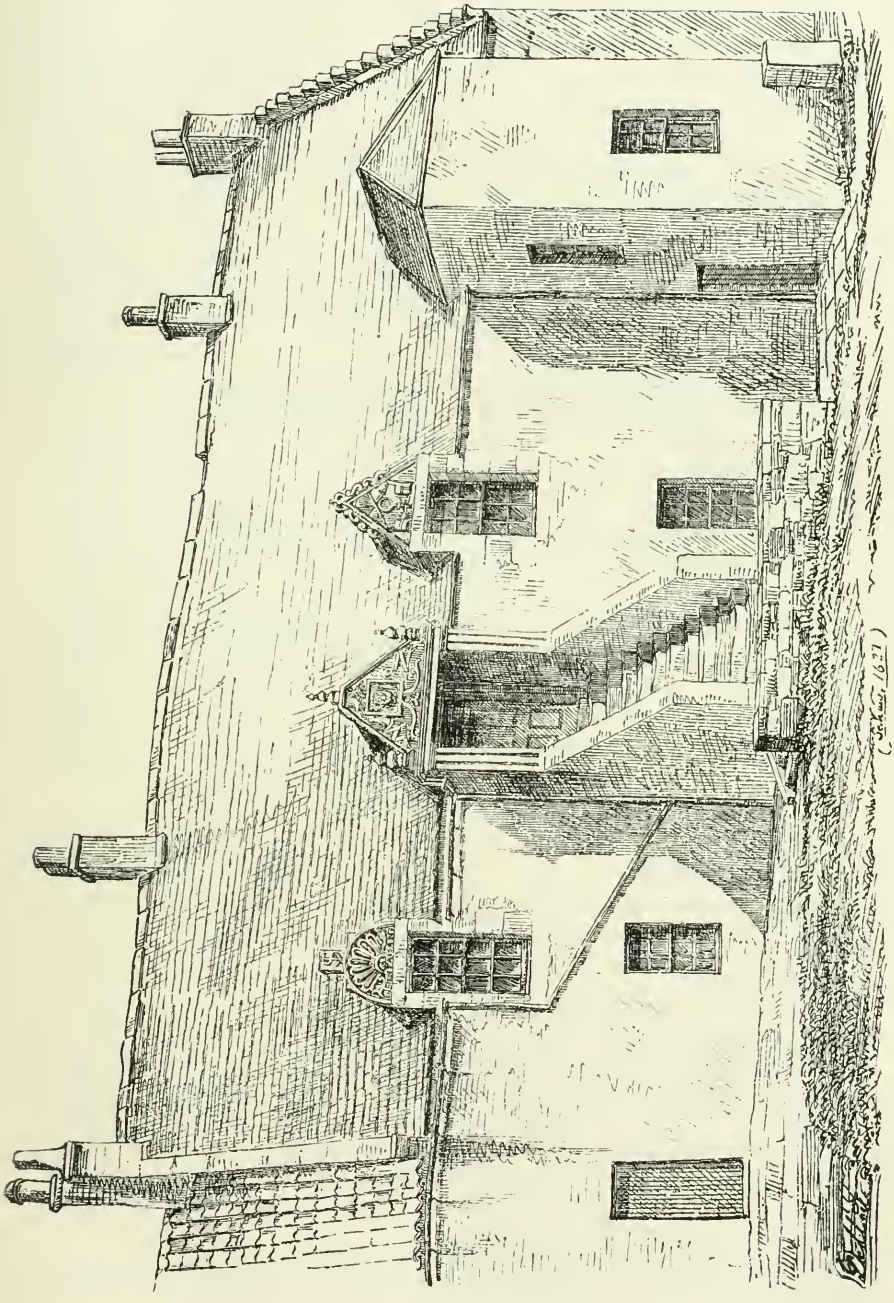


Fig. 221.—Sauchie Tower, House on Wall of Enceinte, West Side.

exist, but they are fast decaying and falling down. The fourth story contained bedrooms, and the attic, on the level of the parapet, was (as at Clackmannan) no doubt for the garrison. The corbels of the angle turrets and battlements are well preserved, and are peculiarly placed in relation to one another (Fig. 219). The stone roof of the pentagonal stair turret is also noteworthy. On the outside of the turret there are stone steps to enable the watchman to climb up to the gutter behind the turret roof, which would thus form a look-out post.

We also find here an interesting fragment of the original wall of the enceinte, with remains of a circular tower and long loop (Fig. 220). These have now been incorporated in a very picturesque specimen of the sort of buildings which the proprietors erected in their courtyards against the enclosing walls in the seventeenth century. This building is much later than the period we are now treating of, but it is good of its kind, and is here illustrated along with the older buildings.

From an interesting account of this castle, written by Mr. Bennett, Secretary of the Alloa Archæological Society, we learn that the barony of Sauchie was granted by Robert Bruce, in 1324, to Henry de Annand. It afterwards was divided between two coheiresses, his descendants, who married William Brown of Colston, and James Schaw of Greenock. The Schaws ultimately acquired the whole property. The tower was in all probability built by James Schaw of Sauchie between 1430 and 1440. The mansion on the west wall (Figs. 222, 223) was erected by one of his descendants in 1631. The tympanum over the entrance door contains the Schaw arms and motto, "I mein weill," together with the above date. On each side stands a figure with a scroll containing the legend—

BY PROMIS MADE RESTORED YE BE
TO HAVE A BLESSED ETERNATTY.

On the left-hand dormer window is the motto, "EN BIEN FAISANT," and on that on the right, "JE ME CONTENTE." "The two phrases," says Mr. Bennett, "may be taken as forming one sentence, and freely translated, 'In well-doing I satisfy myself,' a paraphrase of the Schaw motto."

KINNAIRD TOWER, PERTHSHIRE.

Kinnaird Tower is situated in the Carse of Gowrie, about three miles from Errol Railway Station. It is perched on the summit of a grassy knoll, on the southern slope of the Carse hills, in a situation of great beauty and security. It is isolated from the heights behind by a deep dell, through which a little burn runs, and, commanding the situation on all other sides, the fortalice at the time of its erection must have been a place of great strength and security.

The building is in a fine state of preservation, having been thoroughly renovated a few years ago by the late Sir Patrick Murray Threipland, Bart.

When it came into his possession it was a roofless ruin; but appreciating its value, Sir Patrick had it repaired, and converted it into an interesting local museum, in which capacity we trust it will long remain a monument of his enlightened taste.

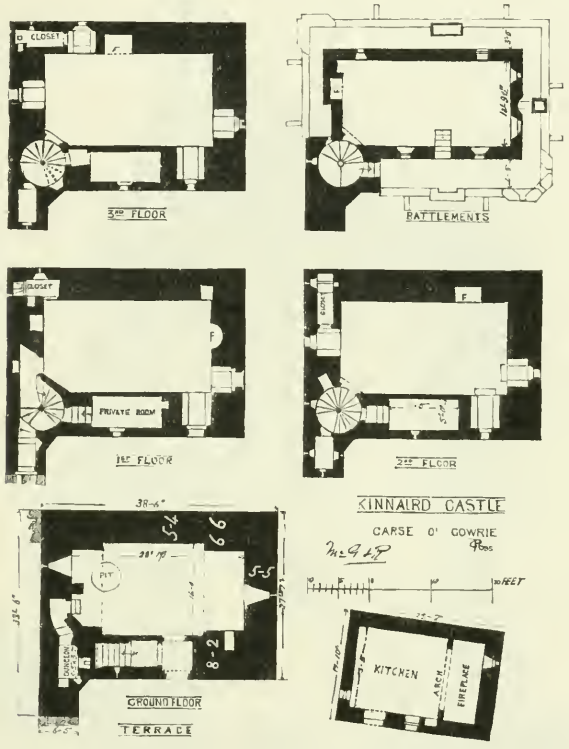


Fig. 222.—Kinnaird Tower. Plans.

The building, which stands on a terrace, is reached by a flight of eight or ten steps, and consists of an oblong keep 38 feet 6 inches east to west by 27 feet 2 inches north to south (Fig. 222). It is 60 feet high from the terrace to the top of the parapet, and about 7 feet more to the ridge of the roof, while from the additional height of the terrace, and the sudden fall of the ground all round, the castle has a most commanding appearance. There has been a courtyard on the west side of the building; the remains of its enclosing wall will be seen projecting on the ground floor plan, at the north-west corner. It has extended westwards towards the roadway shown on view (Fig. 223). A similar broken end of the wall will be observed as a continuation of the projection at the south-west corner of the keep. In the same view is the door leading

out from the staircase of the tower on to the parapet walk of the enclosing wall, at about 15 feet above the ground level. This has been fitted

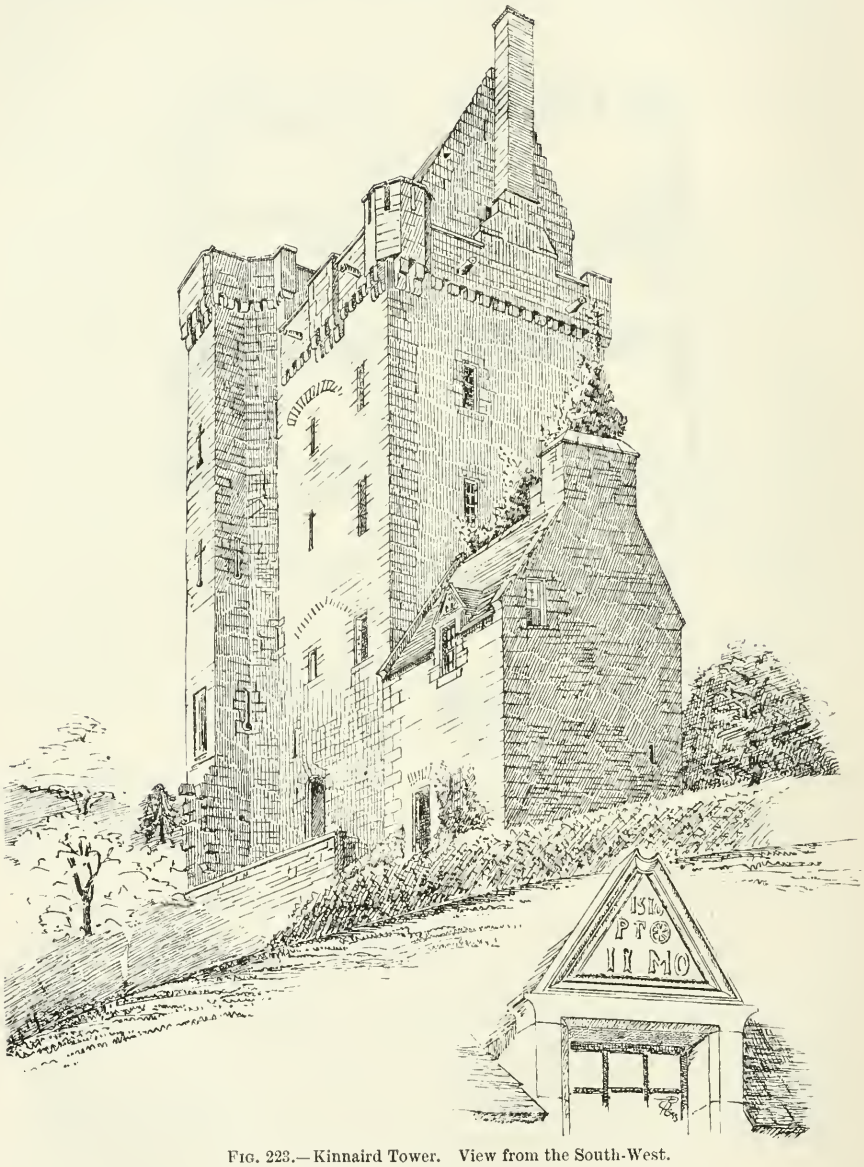


Fig. 223.—Kinnaird Tower. View from the South-West.

with double doors, the outer one evidently folding over like a drawbridge. The sockets in which it wrought, and the iron ring through

which the lowering and raising rope or chain passed being still in position. Opening off the terrace the entrance door to the tower is in the centre of the south front, and is strongly protected with an iron "yett" formed with a circular top to fit the doorway, and constructed in the usual way, having the upright and horizontal bars reversing in the opposite quarters. The stair starts on the left hand on entering. It is formed in the thickness of the wall, and continues as a straight flight till it joins the wheel stair leading to the upper floors. The ground floor has the peculiarity of having been only partly vaulted for a space of from 5 feet to 6 feet at each end, while the centre portion between (about 16 feet 6 inches long) has been of timber, as is apparent from the corbels for resting the beams, which are still in position. All the upper floors of the tower have also been of timber supported on similar corbels, while two of the small mural chambers in the south wall are arched in stone, the stone arches being carried through the wall so as to show on the outer face, as seen on sketch (Fig. 223).

In the ground floor, where shown on plan, there is a pit cut out of the solid rock. It is 18 feet deep by about 4 feet 8 inches in diameter. It is believed to have been used as a dungeon, and not as a well. This may have been so, as it is quite dry, and is tapped by the ravine behind, and by the ground descending rapidly to the front. There is a small dungeon in the south-west wing under the stair, at the depth of a few feet below the floor and the outside terrace. Throughout the ground floor the rock crops up in various places.

There are garde-robes in the walls of all the upper floors, the soil from those at the north being thrown clear from the walls by well-projected sloping stones.

The small projecting buttress at the south-west angle is a remarkable feature. It has apparently been intended partly to contain the staircase, and also to be carried up as a watch-tower. It is also utilised for wall chambers on each floor. The upper chamber in the south-west turret is shut off from the rest of the house by an iron "yett," suggesting that it may have been a sort of prison.

Adjoining the tower (Fig. 224) there is a two-storied house. From its dormer window (Fig. 225) we learn that it was built in 1610. It contains the letters $\underset{\text{II MO}}{\overset{\text{PT}}{}}$. This building on the ground floor contained the kitchen, 14 feet 6 inches by 13 feet 6 inches, with a high-arched fireplace, 13 feet 6 inches by 6 feet. The floor above is reached by a modern stair, the house being inhabited by the keeper of the castle. There is a small service window at the end of the kitchen next the tower, opposite the terrace steps (see Plan). This kitchen is interesting, as showing the progress of ideas in domestic comfort and convenience. It is probably about a century later than the tower itself, and doubtless

during all that period life went on in the tower, as in many others

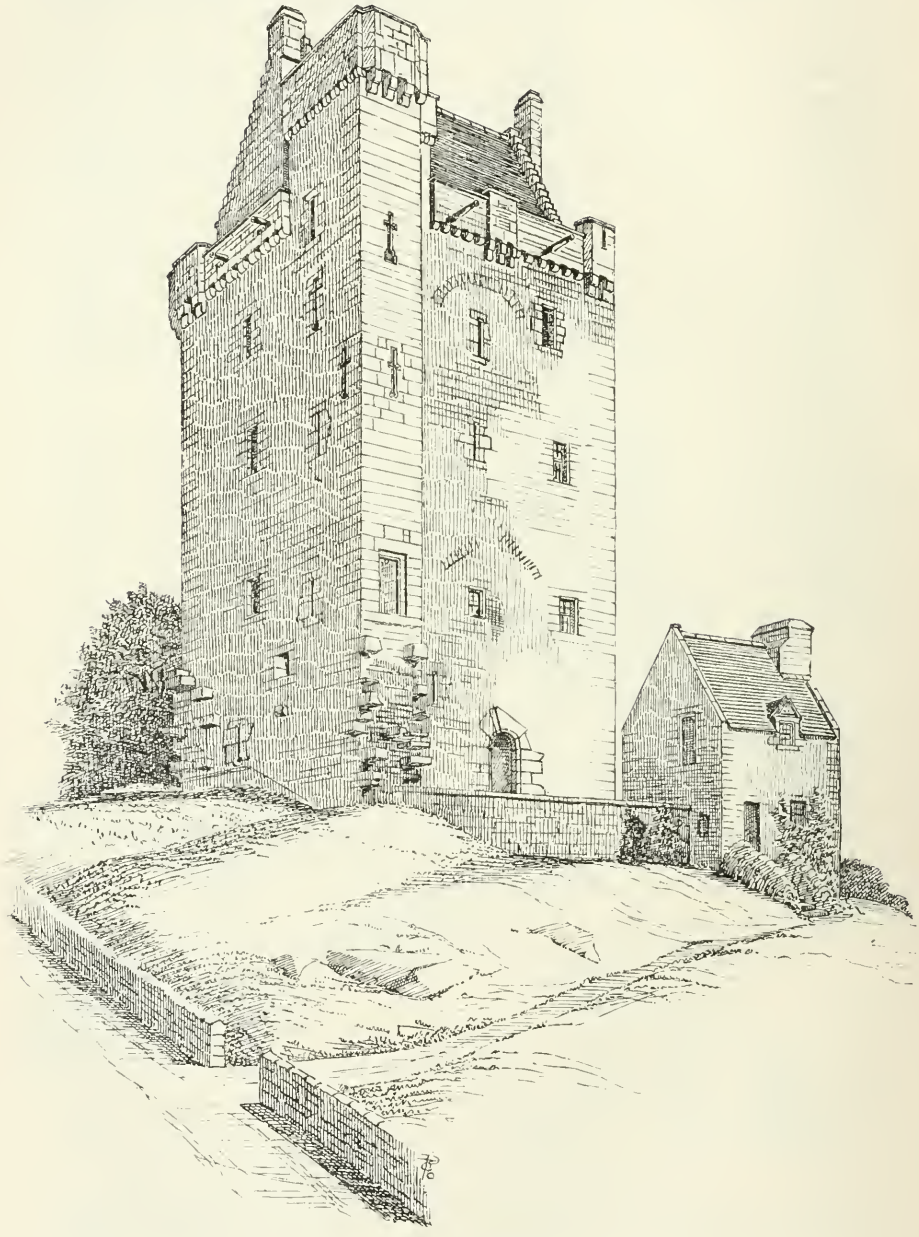


Fig. 224.—Kinnaird Tower. View from the South-East.

throughout the country, subject to the discomfort and inconvenience of extremely limited arrangements.

In 1674 Patrick Threipland purchased the estate of Kinnaird, which immediately adjoins Fingask, a property which he acquired two years before. Kinnaird previously belonged to the branch of the Livingstone family, raised by Charles II. to the Earldom of Newburgh.

BURLEIGH CASTLE, Kinross-shire.

This ancient seat of the Balfours, which stands close to Milnathort, is now reduced to the old keep, and the gate and gatehouse of the court-yard. All the other buildings, which no doubt formerly formed a quadrangle, are now completely swept away.

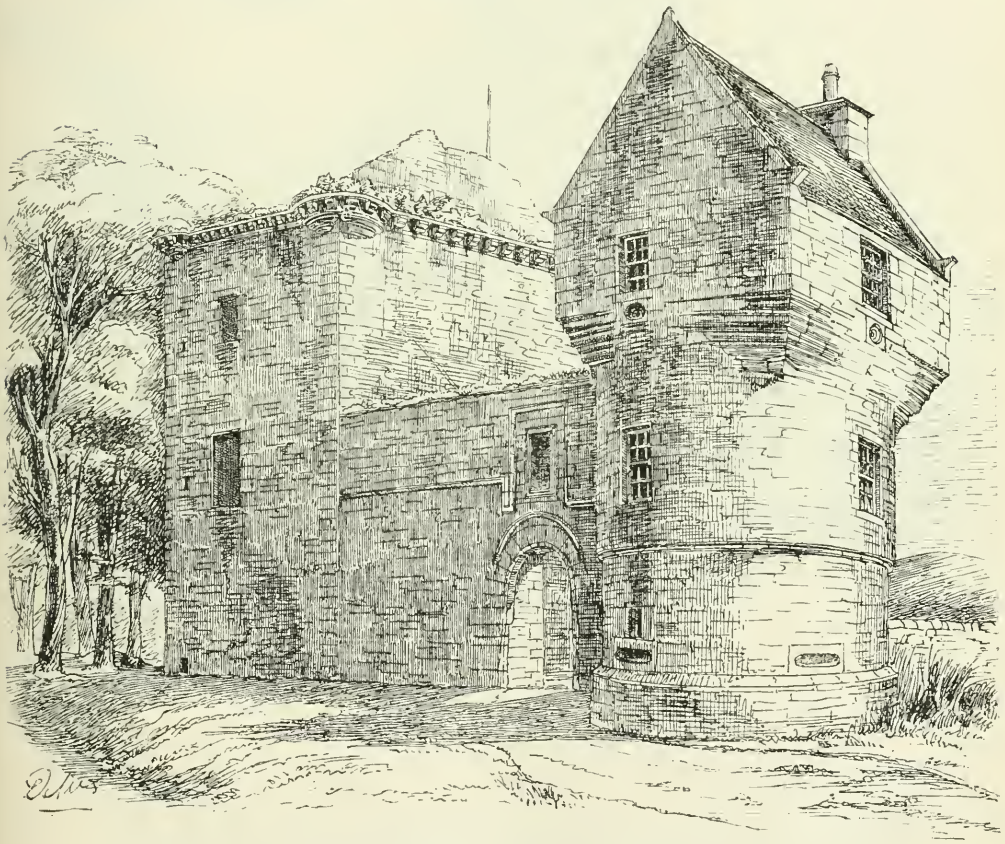


Fig. 225.—Burleigh Castle. View from the South-West.

The family of Balfour came into possession in 1446, and the keep appears to belong to the latter half of the fifteenth century.

The arrangement of the plan and the style of the corbels and parapet (Fig. 225) are of that date.

The keep is a simple oblong tower, and the internal arrangements are very primitive. The ground floor (Fig. 226) contains a vaulted cellar

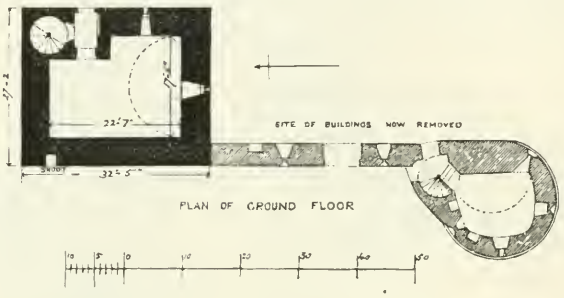


Fig. 226.—Burleigh Castle. Ground Plan.

with entrance door to the keep, and a spiral staircase in the north-east corner. The hall occupies the first floor (Fig. 227), with windows on three sides, and stone seats in the recesses, and a door in the north side, which might be used without the risk of surprise, as might happen if the lower door was opened.

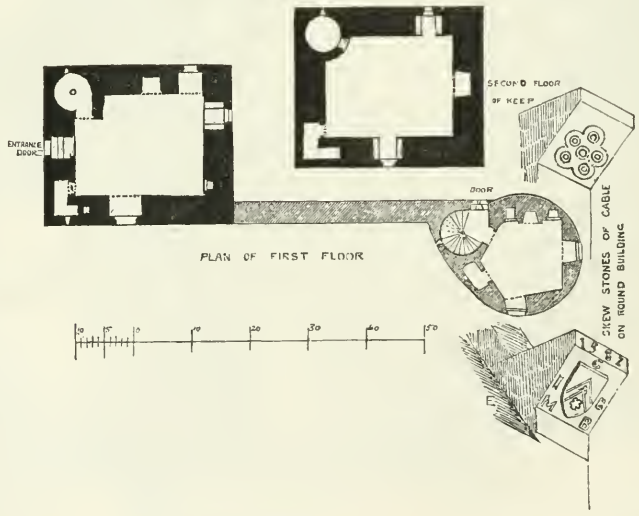


Fig. 227.—Burleigh Castle. Plan of Upper Floors.

The upper floor is similar to the hall, and there was another room in the roof. The first and second floors have garde-robes in the north-west corner, and a shoot door to the moat, traces of which may be seen close along the west side of the castle (Fig. 225).

The existing portion of the west wall of the courtyard, and the round gate tower at what was the south-west angle of the courtyard (Figs. 225, 228), are very interesting. From the inscription on the skew-put (Fig. 227), the date of the tower is 1582. The same stone carries a shield with the arms of Balfour of Balgarvie, with the letters IB and MB, probably for Sir James Balfour of Mountquhanie, who married Margaret Balfour, heiress of Burleigh. On the other skew-put (Fig. 227) is the red rose which is the distinguishing mark of this family amongst the Balfours.

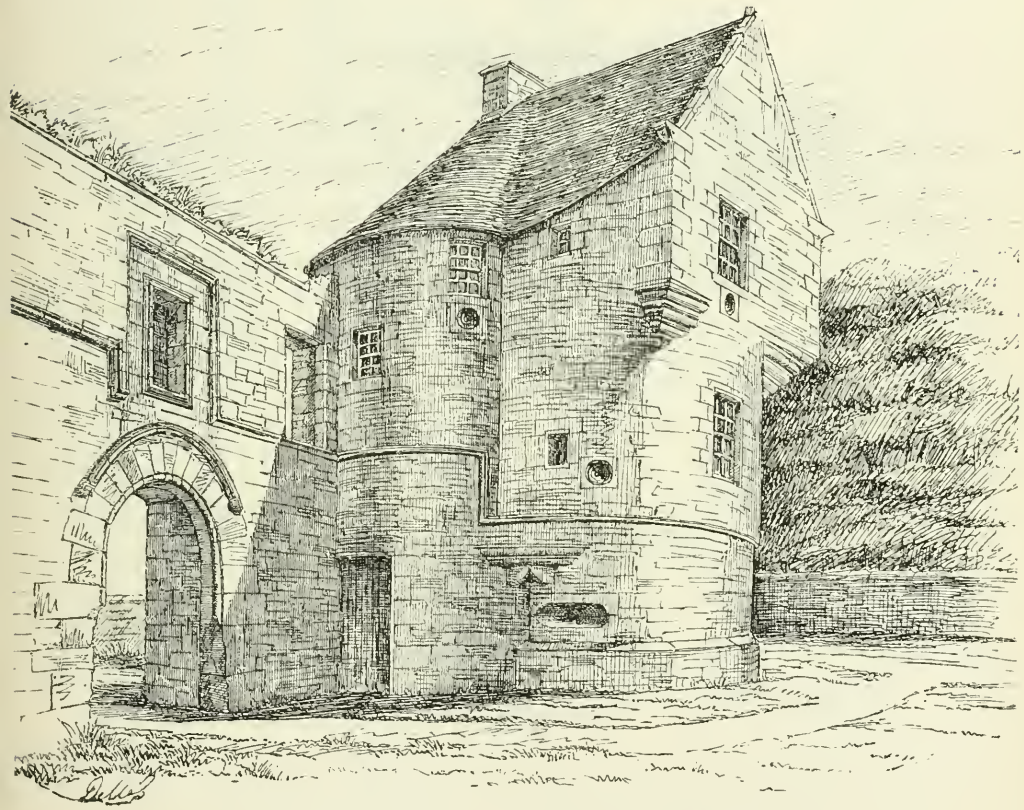


Fig. 228.—Burleigh Castle. Gatehouse from the North-West.

The basement contains a vaulted cellar, from which the curious horizontal embrasures for guns could be utilised. The door, although now outside the courtyard wall, was originally inside it. The turret, so picturesquely inserted in the angle, contains the staircase to the upper floors. The first floor contains a room brought nearly to the square internally, while the upper floor is corbelled out in the rather extrava-

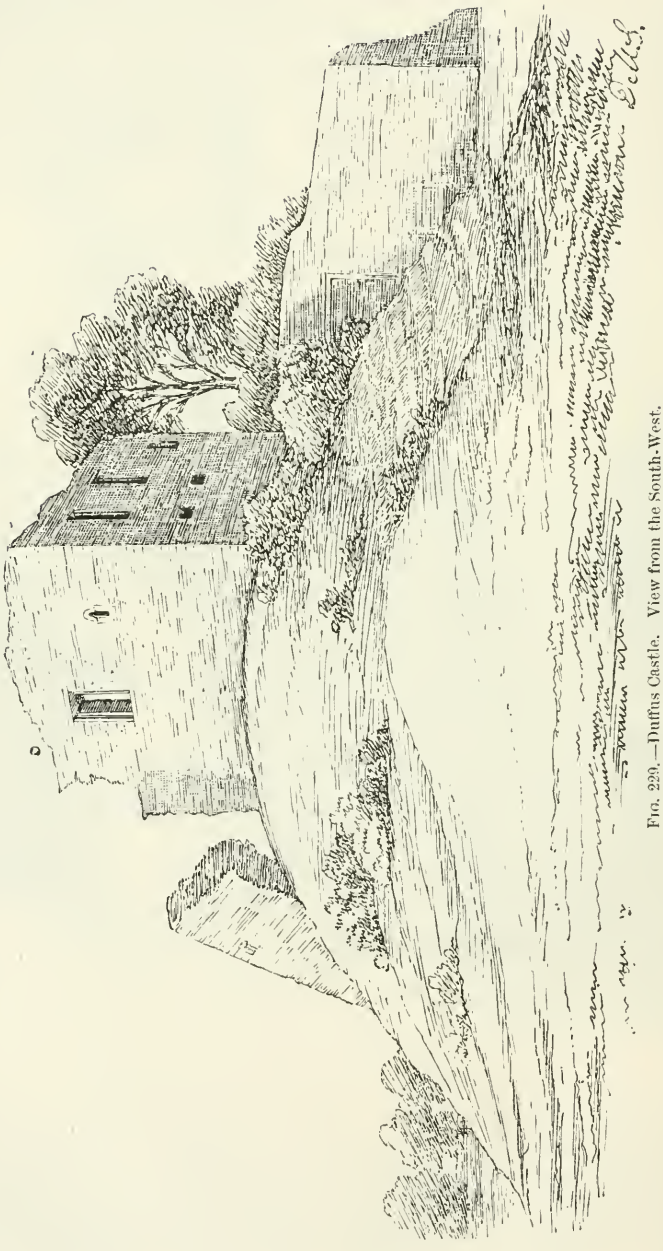


Fig. 229.—Duffus Castle. View from the South-West.

gant but effective manner characteristic of the above date, so as to make it square externally as well as internally. This enables it to be roofed with gables, and these have the rare peculiarity of being finished with flat skews, and not with crow-steps, as was the almost invariable practice at the time. The shot-holes under the windows of the upper floors have the usual widely splayed ingoing, but it is divided with fillets to prevent bullets from being guided into the interior by the slope of the aperture.

DUFFUS CASTLE, Elginshire.

This castle occupies a remarkable site. It stands on the top of an isolated gravel mound in the centre of a flat plain, about two miles north from Elgin, and is still surrounded with a wide ditch on the level ground beyond the base of the hill, enclosing about nine acres of ground. There is nothing to indicate when this ditch was made, but, from the extent of ground enclosed, and from the nature of the site generally, it seems not unlikely that this was originally a fortress of the ancient type before the existing stone-and-lime castle was built.

A castle is said to have been erected here in the time of David II., but the present building is probably about a century later.

In the centre of the space enclosed with the fosse there is a natural mound of some extent.

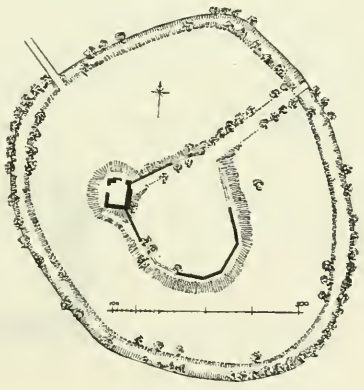


Fig. 230.—Duffus Castle. Plan of Site.

The general plan (Fig. 230) shows that this raised ground was surrounded at the top of the slope with a high wall of enceinte, some portions of which still remain, and may possibly be older than the keep. The latter occupies the "motte," or highest point of the site, which is probably in whole or part an artificial mound, as the foundations on the north side have slipped, and large masses of the north wall of the keep have slid, almost in one piece, down the slope (Fig. 229). The motte, as was usual in ancient fortifications, is placed on the line of the enceinte.

The plan of the keep (Fig. 231) is somewhat unusual, the ordinary quadrilateral figure being broken up with several projections, and the east wall, which is within the wall of enceinte, has a carefully dressed base with a triple splay.

The windows have well-formed recesses, and the jambs have double splays. The small square windows of the basement recall similar openings at Rait Castle, and the small pointed windows are also of a similar character in both buildings.

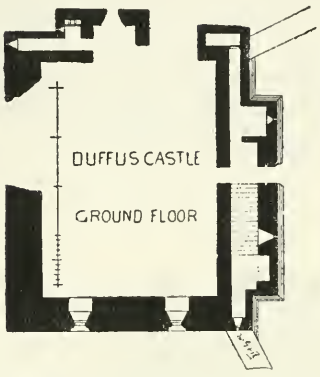


Fig. 231.—Duffus Castle. Plan of Keep.

It is now impossible to decide what the internal arrangements were, but it is probable that the stair ascended in the passage to the left of the entrance door, the other wall recesses being occupied with guard-room, passages, garderobes, etc.

The castle belonged originally to the De Moravia family, and afterwards passed to the family of Sutherland, who bore the title of Lord Duffus from 1650 till 1843.

REDCASTLE, Forfarshire.

Redcastle occupies a very ancient site, overlooking the German Ocean, at the mouth of the Lunan Water, a few miles south from Montrose. A castle was erected here by William the Lion as a hunting-seat, and it is possible that the fragment of the ancient and massive wall

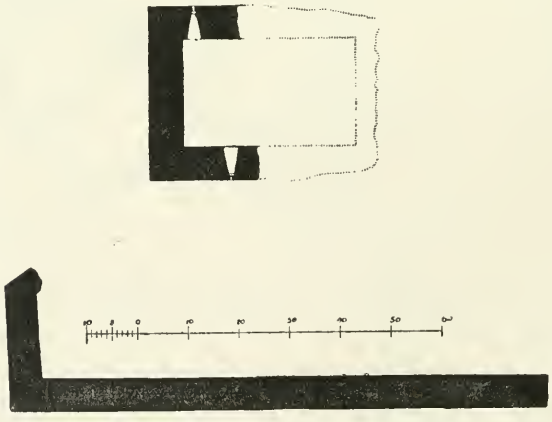


Fig. 232.—Redcastle. Ground Plan.

of enceinte still existing (Fig. 232) may be a part of the original fortress. The keep has been of the ordinary quadrilateral figure, the foundations

of the whole being still traceable, but only the north gable and parts of the side walls now remain. These walls are of nearly the original height, and have been crowned with a parapet and angle bartizans (Fig. 233), the double corbels of the former and the projecting corbelling to support the latter being still entire. The walls are faced with good red freestone ashlar.

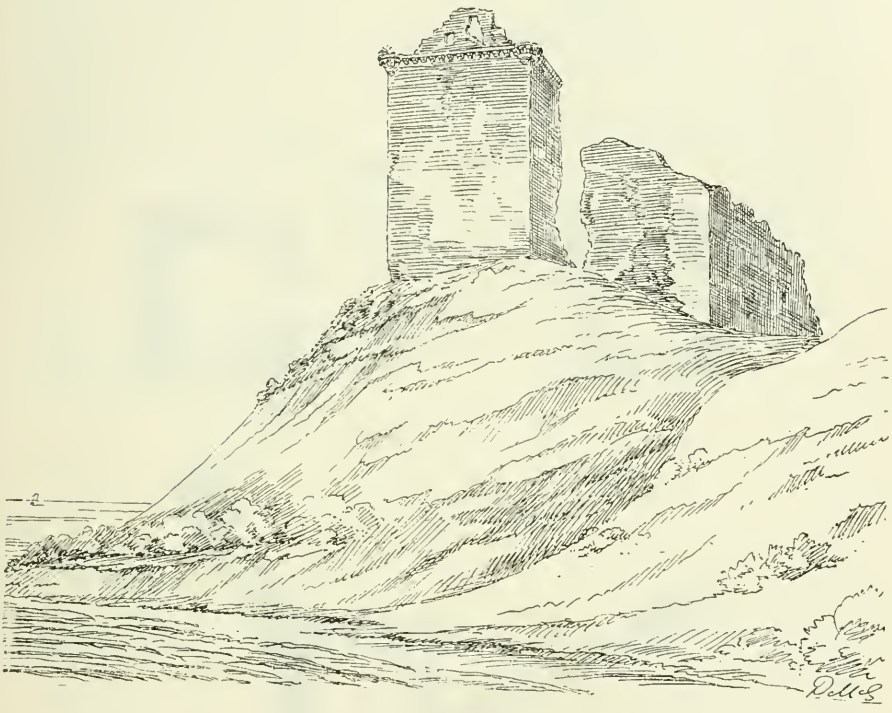


Fig. 233.—Redcastle. View from the North-West.

The above features indicate that this keep belongs to the fifteenth century.

DUNOLLY CASTLE, Argyllshire.

Dunolly Castle is grandly situated on the top of a precipitous rock some 70 or 80 feet high, overlooking the sea, about a mile north from Oban. It consists of a keep, built on and forming a part of the walls of enceinte of the castle. The courtyard, which is about 90 feet from north to south by about 88 feet from east to west, over the walls, is nearly square on plan (Fig. 234), and the keep, which is in the north-east angle, is set diagonally to the walls of the courtyard. Only the east and north curtain walls remain throughout their whole length, while along

the south and west the face of the cliff determines the area of the courtyard. On both these fronts the rock was a sufficient protection from assault, walls being only necessary to screen the courtyard. The existence of walls along these fronts is now indicated by grassy mounds, except at the north-west angle, where there are remains of what seem to have been later buildings. Outside the two existing curtain walls to the north and east, the summit of the rock is fairly level for an average distance of about twenty yards, beyond which the ground falls steeply. The approach to the castle was from the north. The castle is of great strength, the walls varying from 9 to 11 feet in thickness. The entrance is in the east curtain, through a doorway about 5 feet wide, provided with a bar-hole. There is another zigzag entrance through the north curtain.

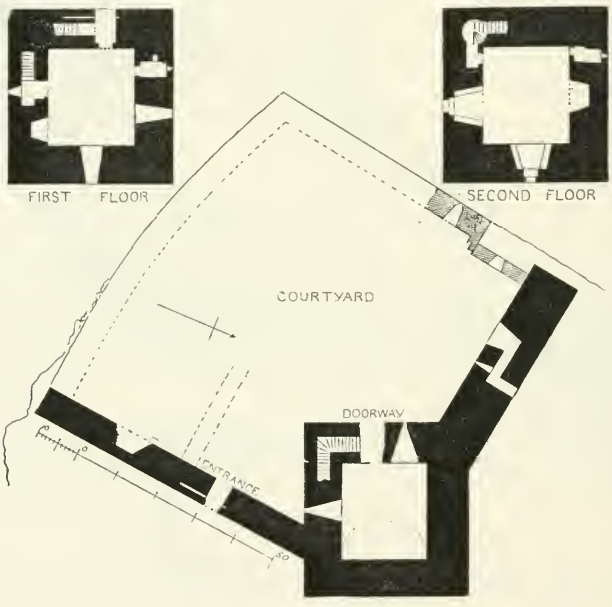


Fig. 234.—Dunolly Castle. Plans.

The keep measures 39 feet by 37 feet outside, and contains a vaulted chamber on the ground floor about 14 feet high, lighted by two narrow slits. This is the only vaulted floor in the keep, all the upper floors having been of timber, the corbels for the beams of which still remain. The entrance doorway to the keep is on the ground floor. In the right-hand ingoing of the doorway a straight stair, 2 feet 3 inches wide, formed in the thickness of the wall, leads to the first floor, landing near the centre of the south wall. This floor, which was not the principal one, was also reached from the courtyard by a ladder (Fig. 235), the door being nearly above the one below. This doorway has the unusual arrangement

of a bar-hole inside, while, curiously enough, the door below is not so provided. The first floor, measuring 21 feet 9 inches by 19 feet 6 inches, is lighted by two windows, and contains a garde-robe and fireplace.

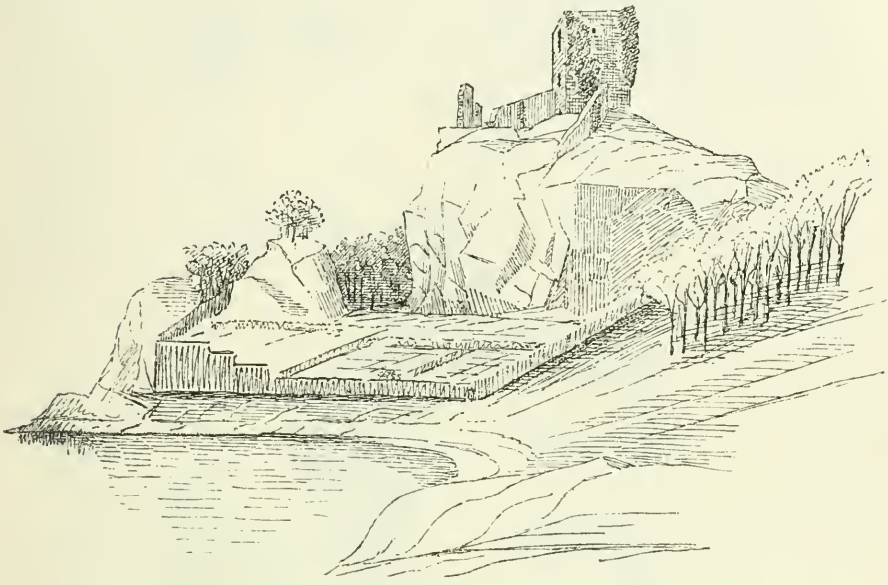


Fig. 235.—Dunolly Castle. View from the South-West.

The second or hall floor is reached by a stair in the thickness of the wall, starting from the ingoing of the outer entrance doorway similarly to the stair below, and from the top of this stair a "corkscrew" in the south-west angle leads to the top. The hall, entered at the south-west corner (see Plan), is similar to the floor below, only that its windows are wider, and contain stone seats, and it is of greater height, being 12 feet as against 9 feet. The upper floor over the hall measures about 8 feet from the corbels for supporting its floor to the parapet walk. The height from the ground to the parapet walk is thus about 45 feet in all, and, allowing 5 feet for the parapet, brings the height of the walls to about 50 feet.

Like the neighbouring castle of Dunstaffnage, Dunolly has a tradition carrying the date of its erection much further back than sober history can follow. It is supposed to have been the original seat of the Macdougalls, Lords of Lorn, and may have been the site of a primitive fortalice. There is, however, no reasonable grounds for dating it earlier than the beginning of the fifteenth century, although the site, which is a markedly strong one, may have been occupied for defence at a very early period.

BENHOLME TOWER, Kincardineshire,

A fifteenth-century keep, situated on the high ground above the sea a few miles north from Montrose. It is still entire, and is attached to a modern mansion. The tower is crowned with a parapet and angle bartizans (Fig. 236), having the corbels of the usual form of this period.

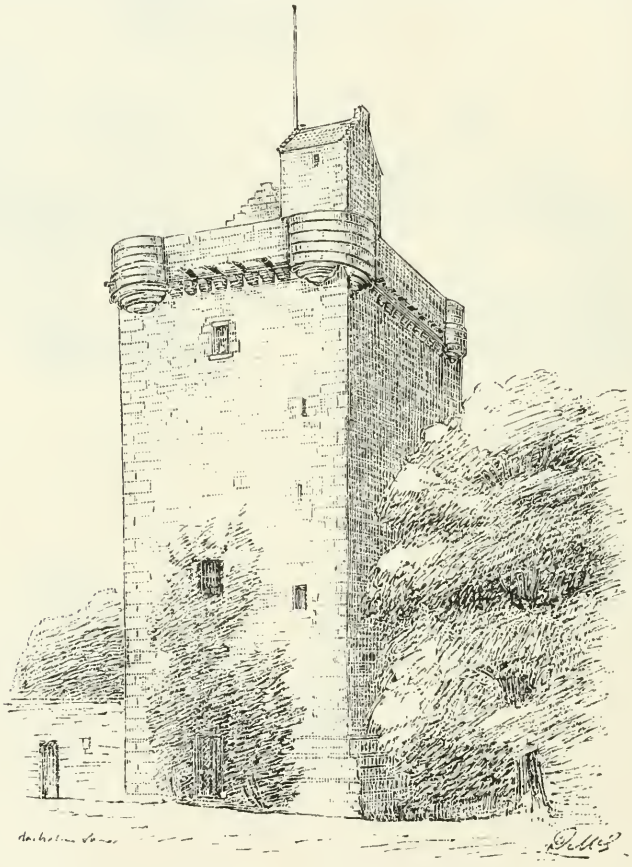


Fig. 236.—Benholme Tower. View from the South-West.

A square cape house, or watch-turret, has been erected at a later date upon the top of one of the bartizans. This indicates in a more primitive form the various additions which were sometimes made on the parapets, by raising them and covering them in with roofs, as at Comlongan and Newark Castles. The hall (Fig. 237) is unaltered, and contains all the ordinary arrangements — windows with deep square recesses, wall chambers, garde-robe, etc. The ornamental ambry (Fig. 237) or side-

board at the upper or fireplace end of the hall is a characteristic feature of the time.

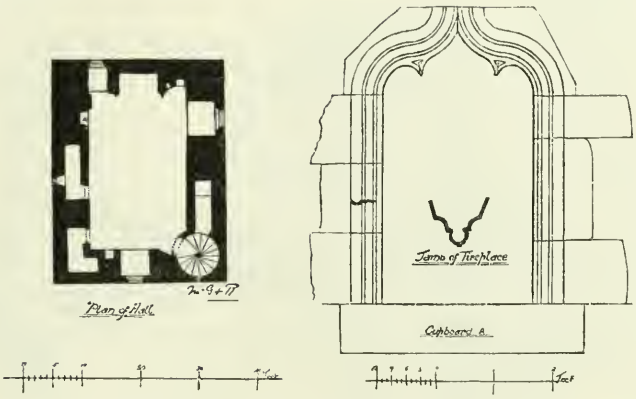


Fig. 237.—Benholme Tower. Plan and Details.

DRUMMOND CASTLE, Perthshire.

This castle is built on a rocky eminence about three miles from Crieff. It is situated in an extensive and beautiful park, and commands a fine view over Strathearn.

Sir John Drummond purchased this property in 1487 and built the original castle. It consisted of an oblong keep (Fig. 238), 43 feet by 37 feet, set on the highest point of the rock.

The entrance was on the first floor (to which an outside stone stair now leads), whence a narrow stair in the thickness of the wall descends to the vaulted basement, and a newel staircase in a projecting turret ascends to the upper floors.

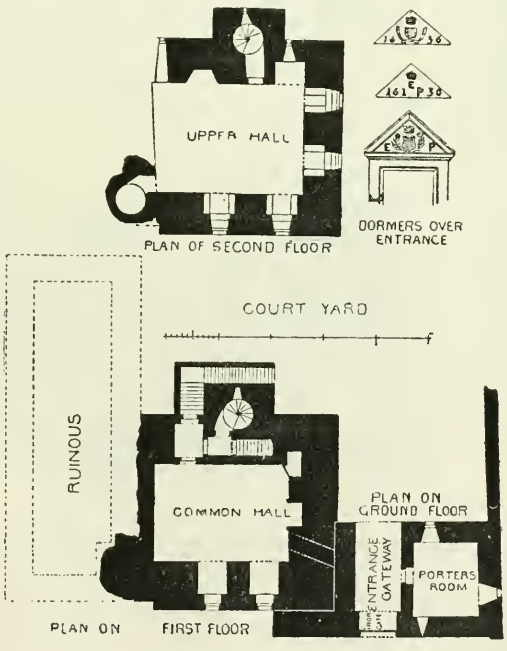


Fig. 238.—Drummond Castle. Plans.

The first floor contained the common hall, and the second floor the principal hall of the castle, with windows furnished with stone seats.

Above this there were originally one or two stories, but the upper part of the keep is now modernised.

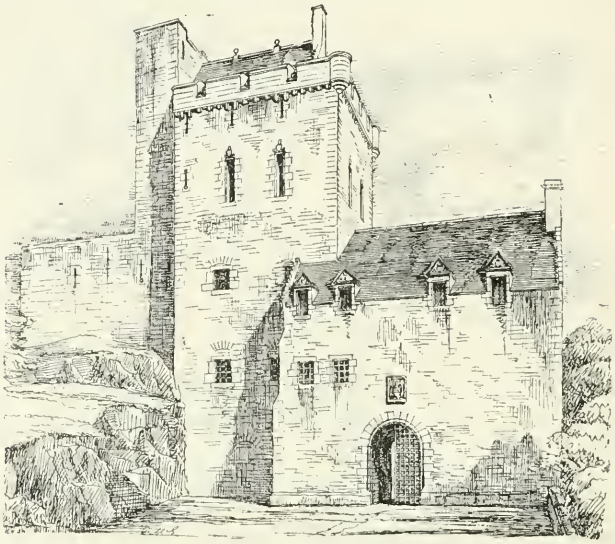


Fig. 239.—Drummond Castle. View from the West.

The family acquired the title of Earl of Perth in 1605, and the wing which adjoins the old keep on the south was built soon after. The dormers (Fig. 238) contain the Drummond arms with the Earl's initials, and the dates 1630 and 1636.

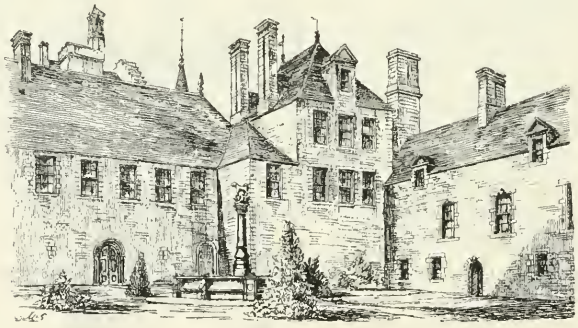


Fig. 240.—Drummond Castle. Inner Courtyard.

On the ground floor of this wing is the arched gateway to the castle (still provided with its double iron gate) and a porter's room.

The upper floors gave extended accommodation connected with the keep, but have now been modernised and converted into an armoury, containing many curious Highland relics.

An extensive range of buildings was also erected on the north side of the keep (shown by dotted lines on Plan), probably at the same period,

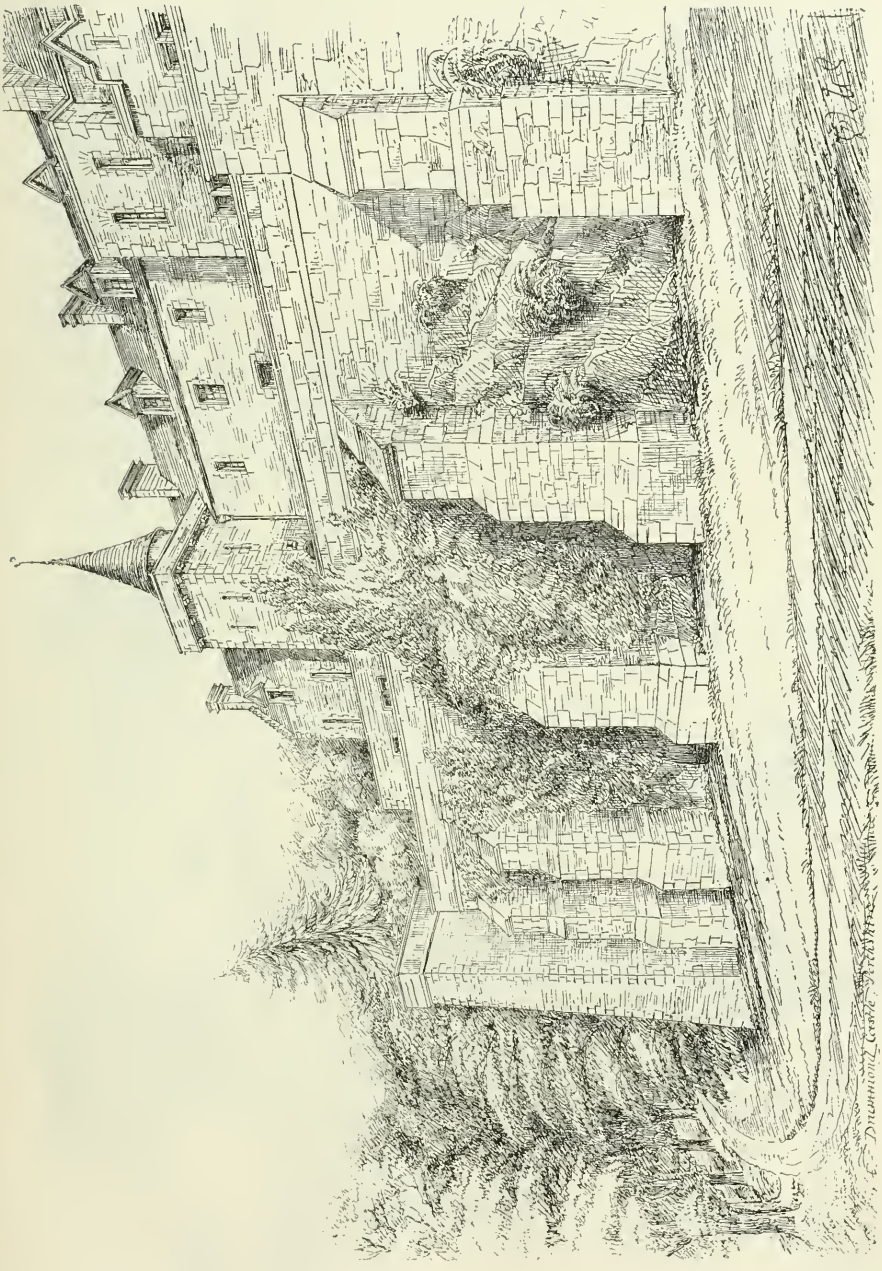


Fig. 241.—Drummond Castle. View of North Side.

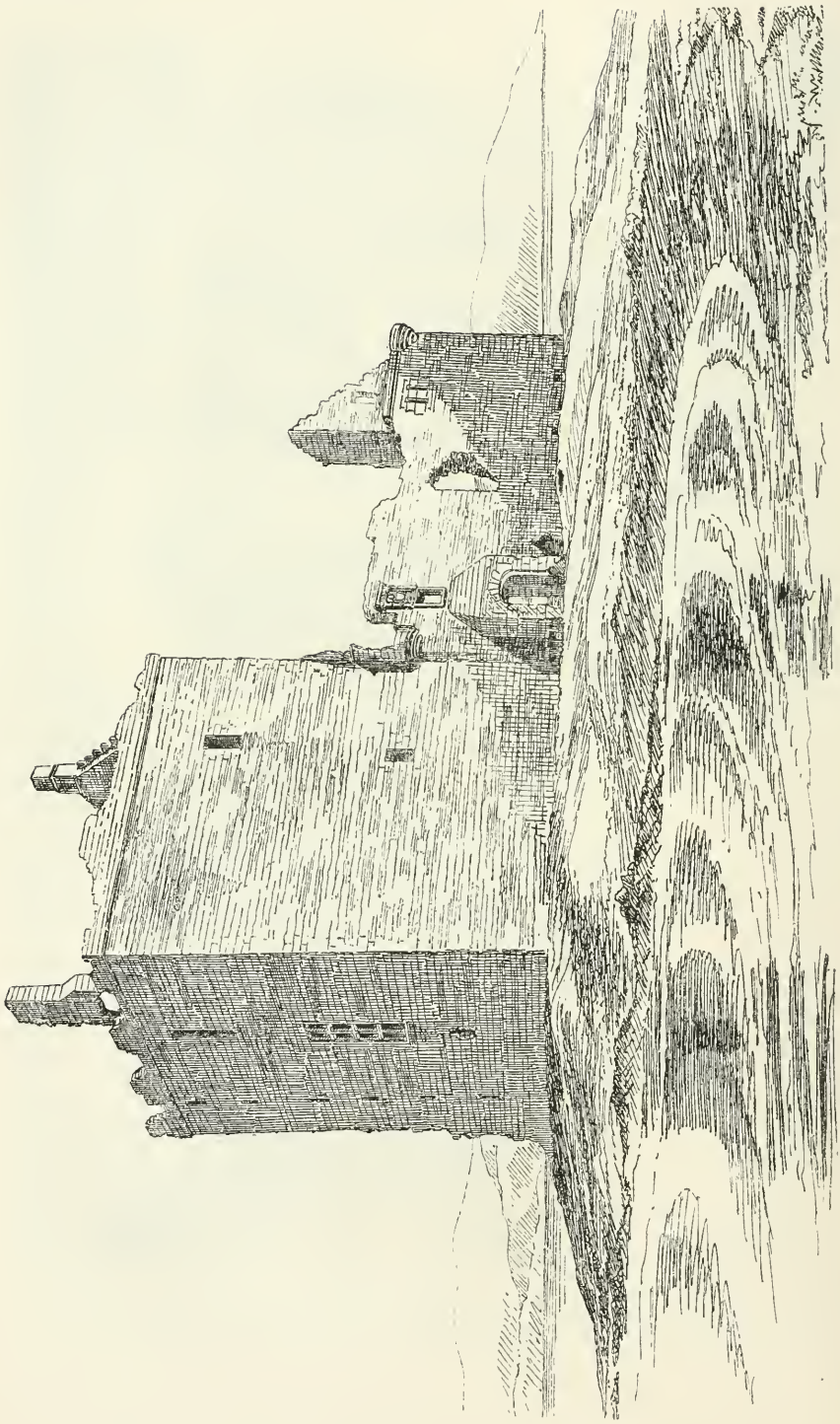


Fig. 242.—Rosyth Castle. View from the North-East.

but these are now so ruinous that it is impossible to distinguish their various uses. They no doubt contained vaulted kitchen and offices on the ground floor, and the reception-rooms common at the time on the upper floors.

The castle is said to have suffered greatly at the hands of Cromwell in the middle of the seventeenth century. It was strengthened in 1715, and garrisoned by Royal troops. To prevent this again happening, the Dowager Duchess of Perth is stated to have caused the walls to be levelled with the ground in 1745.

The old castle being ruinous, a modern mansion was erected to the eastward about 1689. A view of the courtyard (Fig. 240) is given, from which it is apparent that it has been somewhat modernised. The north side of this mansion overlooks a terrace on the top of the rock above the approach. The terrace (Fig. 241) is supported with large and massive buttresses, which are partly old, and contribute greatly to the picturesque effect of the pile. The beautiful terraced gardens on the south side of the castle are of world-wide fame.

The estate now belongs to Lady Willoughby d'Eresby.

ROSYTH CASTLE, Fifeshire.

Rosyth Castle is situated on a low-lying, flat peninsula on the north margin of the Firth of Forth, opposite Queensferry, and is surrounded at high tides by water. The peninsula towards the Firth presents a rocky face a few feet above the water, gradually merging into sandy shores as it approaches the land.

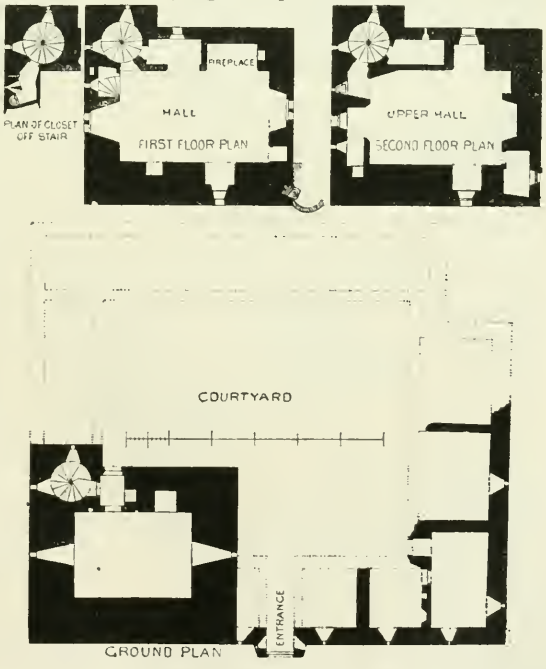


Fig. 243.—Rosyth Castle. Plans.

The castle (Fig. 243) consists of a keep and buildings of a later age, the latter being now very ruinous. The keep is in tolerable preservation, and is oblong on plan (Fig. 243), measuring 48 feet 6 inches by 41 feet 3 inches over the walls, with a staircase at the south-east corner, 17 feet in breadth over the

walls, and projecting 5 feet. The height from the ground to the top of the battlements is 57 feet 6 inches, and about 68 feet to the ridge of the gables. It contains four stories (Fig. 244), the basement and the first floor or hall being vaulted. The walls throughout are of considerable thickness, varying from 6 feet to 10 feet 6 inches.

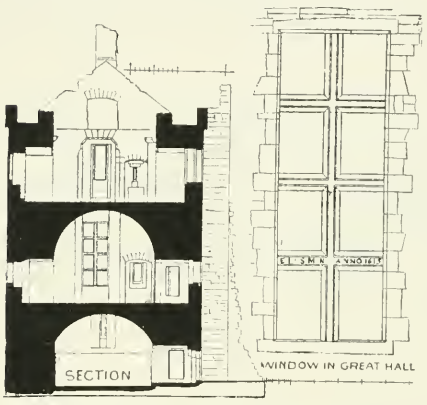


Fig. 244.—Rosyth Castle. Section of Keep and Elevation of West Window of Hall.

The entrance doorway, with elliptic arch, is on the south side towards the Firth, adjoining the staircase tower (Fig. 245), and leads directly by a passage through the wall to the ground floor, which is two or three steps down. From this passage the corkscrew stair, unlike the arrangement found in most other keeps, goes to the top. The lower vault is subdivided into two stories, the uppermost of the two floors being reached by a stair down from the hall on the first floor.

The hall (Fig. 246), which is 27 feet long by 20 feet wide, and 20 feet high, is vaulted. It is lighted by three windows, the large ones at each end, which have mullions and transoms, being insertions. The original end windows, which can still be partly traced, were small, and high up from the floor. The lower compartments of the inserted windows (Fig. 244) were closed with shutters, the upper compartments having been glazed. On the outside of the under transom of the west window is the inscription, much wasted, E. I., an anchor, S. M. N., anno 1635 or 55. The E. is doubtful, the rest fairly legible. The fireplace is in the south wall, and has had a flat arch, moulded on edge, and the moulding is continued down the jambs. Adjoining the fireplace there is a mural chamber. Half-way up to the second floor a garde-robe is formed in the east wall, the small window of which has a curious upright division in the ingoing, as shown on the plan, probably for the purpose of enabling one loop to light both the garde-robe and the adjoining passage, which contains a stone basin and drain. The upper hall, which is of the same size as that just described (Plan, Fig. 243), has the fireplace in the west end. It contains two mural chambers and a garde-robe, and is entered through a porch from the stair. The top story in the roof is quite ruinous.

The additions to the castle extend westwards and southwards from the keep, and formed a courtyard (Fig. 243). Of these buildings only the north and part of the west walls now remain, in a very ruinous condition,

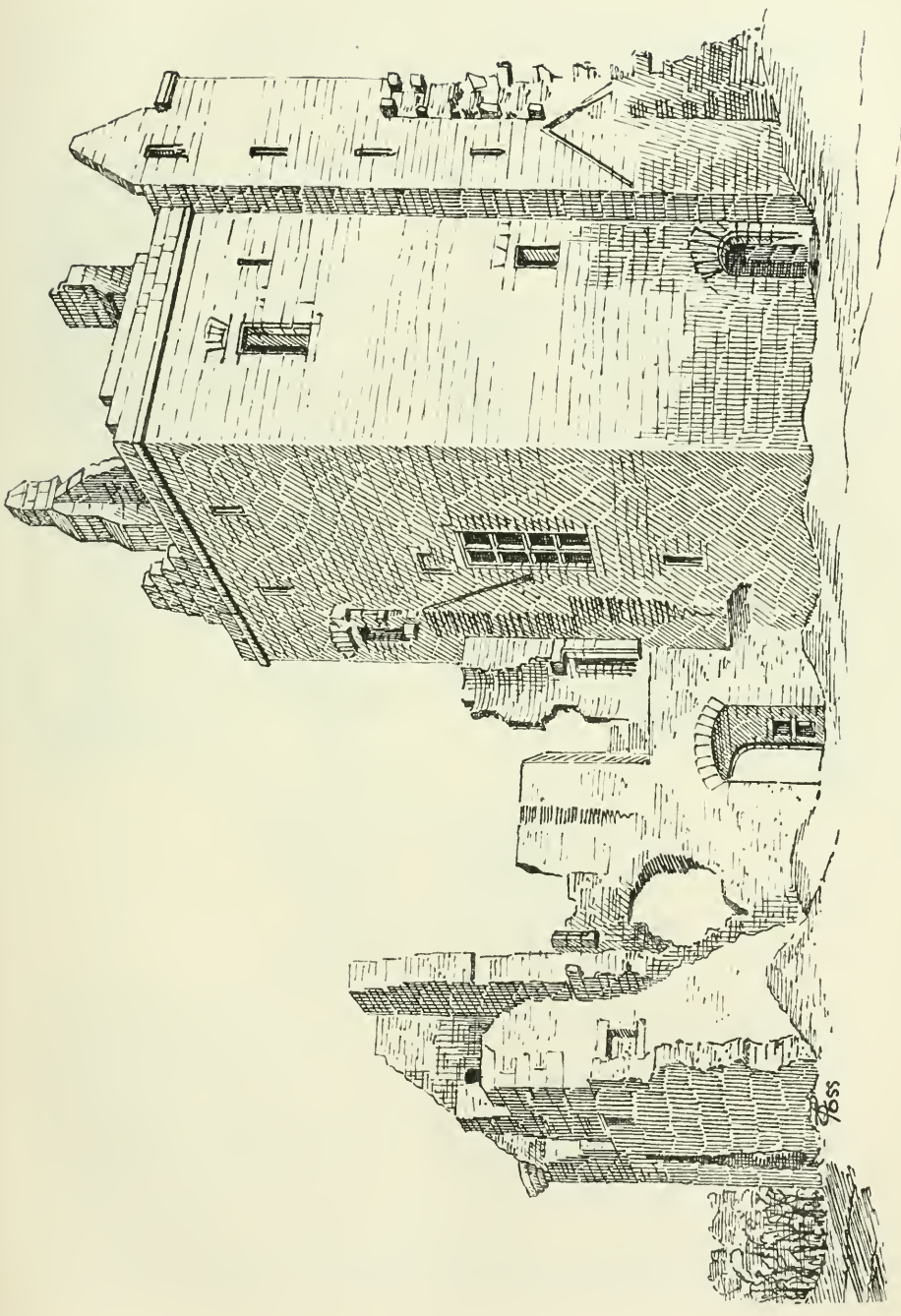


Fig. 245.—Rosyth Castle. View from the South-West.

the remainder being traceable here and there, as shown by dotted lines. The extensions being so ruinous, we have included this castle amongst the simple keeps, rather than the castles with courtyards.

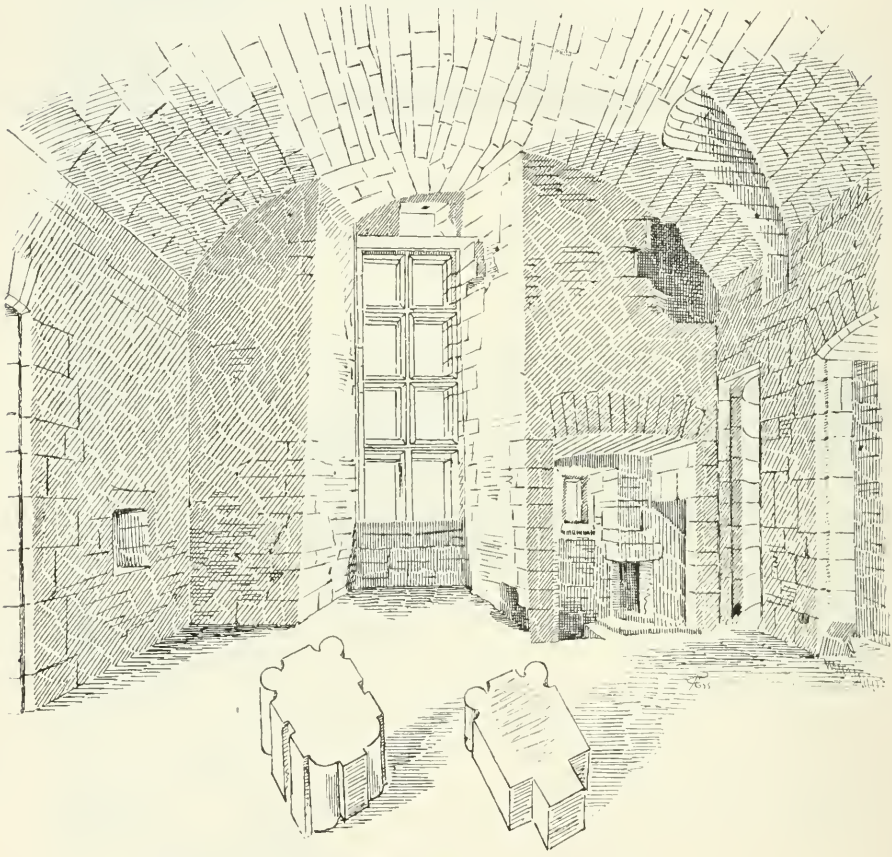


Fig. 246.—Rosyth Castle. Interior of Hall.

The entrance to the courtyard is on the landward or northern side through an elliptic archway 6 feet wide, having a slightly projecting porch with a stone roof (Fig. 247). Above the porch are two panels, the arms on the undermost being quite decayed; but the one above, in an ornamental frame, is well preserved. This panel contains a shield surrounded by a wreath of Scotch thistles and a crown above. At the base is a crouching unicorn, occupying the full width of the panel, which contains the date 1561, and the letters M. R. (Maria Regina), with a crown above the latter. It was in August of that year that Queen Mary sailed into the Forth on her return from France, and landed on the opposite shore at Leith. It is to be hoped that some effort will be made

to secure the preservation of this memorial of that event, as this part of the castle is fast going to destruction. On the level of this panel, adjoining the keep, there are the corbels of a projecting turret staircase, of which only the merest fragment remains. This staircase has entered from the keep at the two main floors, and formed a connection between the keep and the additional buildings. The corbelling of another turret may also be seen at the north-west corner of this wall.

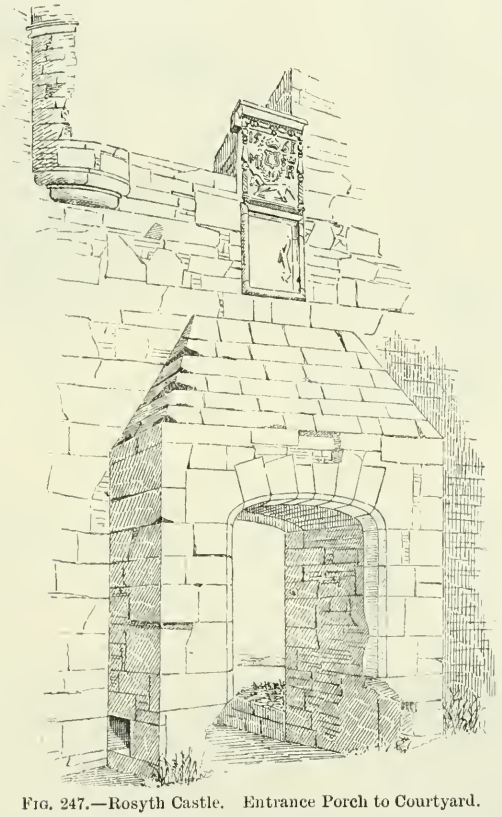


Fig. 247.—Rosyth Castle. Entrance Porch to Courtyard.

Built into the walls of a farm-steading adjoining are some carved window pediments from the castle. One with a scroll contains the name of Stewart.

The dovecot at Rosyth (Fig. 248) is oblong in plan, with a fine stone roof and gabled ends, having crow-steps with gablets, a form by no means common in Scotland. There is a remarkable scroll carved on the lintel of the doorway.

The ancestor of the Stewarts of Rosyth was James Stewart of Durisdeer, brother-german to Walter, the Great Steward of Scotland, father of King Robert II.

There are no features about this castle which definitely fix the date

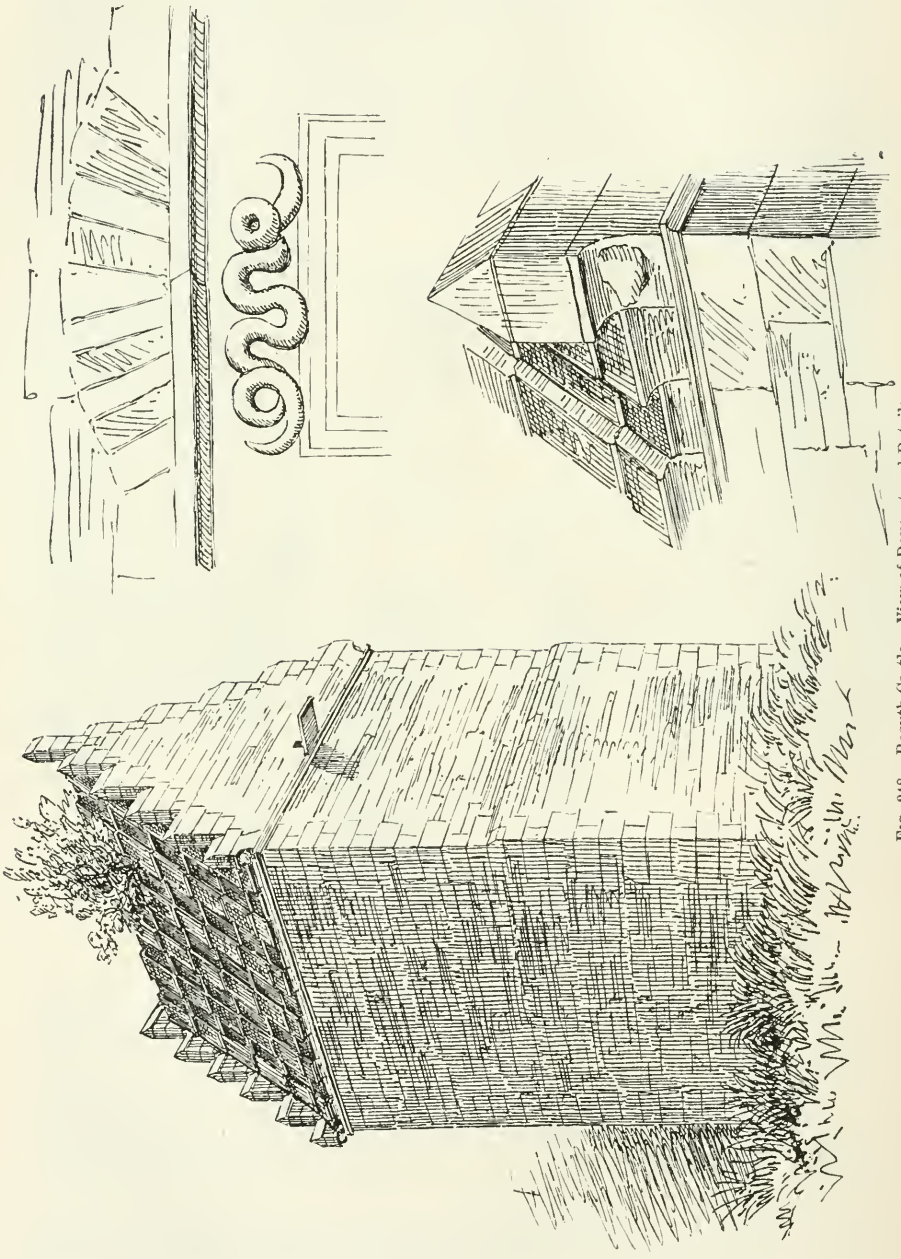


Fig. 248.—Rosyth Castle. View of Dovecot and Details.

of its erection. There is the same small break to contain the staircase

here as at Edzell and Affleck, and the plan of the building also corresponds with these keeps. We may therefore assume that its date is similar, or about the end of the fifteenth century.

LEVEN CASTLE, Renfrewshire.

Situated on the steep bank of a stream near Gourock on the Clyde, this castle (Fig. 249) is built on a plan very unusual at this period, viz., that of a double tower. This form of plan was however adopted in some cases at a later period. Leven Castle seems to have been originally a simple keep of the usual plan of the fourteenth or fifteenth

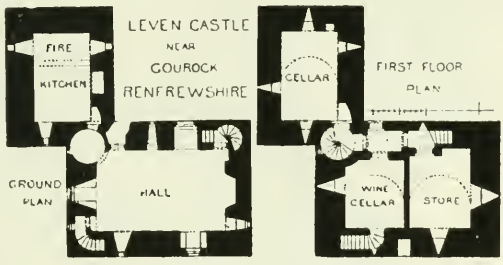


Fig. 249.—Leven Castle. Plan.

century, the wing to the south-east being probably a later addition. The ground floor contains two vaulted cellars, one of them having a private stair down from the hall. The entrance door was on the ground floor, with a narrow straight stair to the first-floor landing, which is continued as a newel stair in the south-west angle to the upper floors. The hall windows have square recesses furnished with stone seats. From the style of the corbel table (Fig. 250) it may be inferred that the south-east wing was added about the beginning of the sixteenth century, when the old keep seems to have been remodelled, and the same cornice continued all round the building. It is of the ornamental pattern, in which mock corbels are introduced as ornaments. At this period additional accommodation has been desired, particularly a kitchen, which has led to this peculiar form of wing being built. The larger newel staircase between the two towers has apparently also been introduced at the same time.

This castle may possibly have been all built at one time, but we are inclined to think that the above account of it is more likely to be correct. In the later double-tower keeps, such as Burgie, one of the divisions is carried up as a watch-tower, which is not the case here. The numerous stairs from the basement are also very unusual features. The straight stair was all that was necessary, and is evidently original, together with

the well-guarded lobby at the entrance, these being features common to most of the keeps of the period. This leads us to infer that the straight stair was the original one, and that the newel stair connecting the two towers was a subsequent addition. The hollow in the wall of the wing, where access from the stair is obtained on the different floors, has also the makeshift appearance of an addition. The vault seen in the foreground (Fig. 250) has probably been connected with outbuildings in the barmkin.

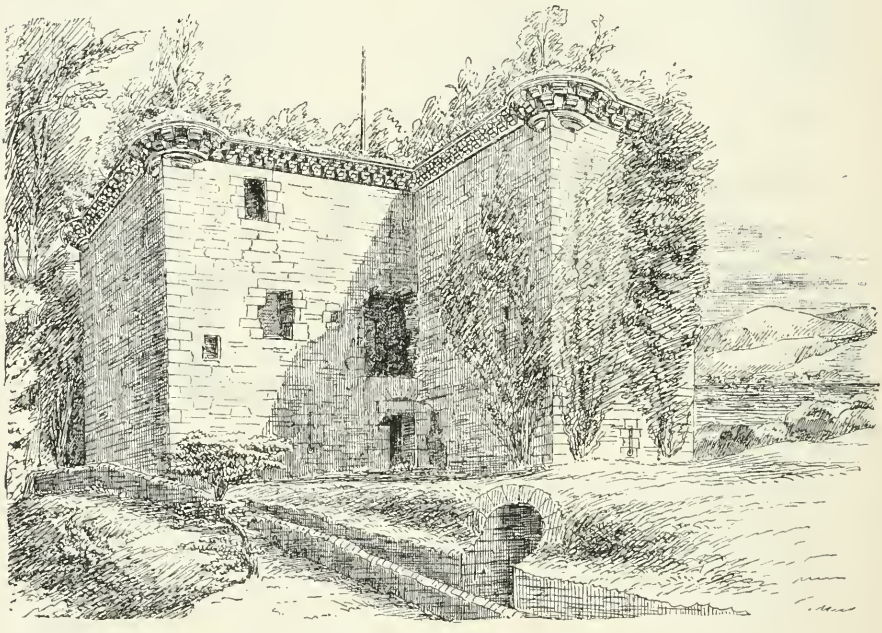


Fig. 250.—Leven Castle. View from the South-West.

Before 1547 this castle belonged to the Mortons. At that date it passed to the family of the Sempills, and it is not unlikely that the remodelling was carried out about that time. It is now the property of the Shaw Stewarts.

INVERKIP CASTLE, Renfrewshire,

The original seat of the Stewarts, now represented by Sir Michael R. Shaw Stewart, is situated on the edge of a cliff near Inverkip, on the Firth of Clyde. There was a castle here in the days of Bruce, which is referred to by Barbour, but the present building (Fig. 251) is evidently of later date, probably about the end of the fifteenth century. The style of corbelling at the parapet was not introduced till about that

time (see Edzell Castle). The entrance to the hall was, as usual, on the first floor, to which a modern stone stair has now been built.

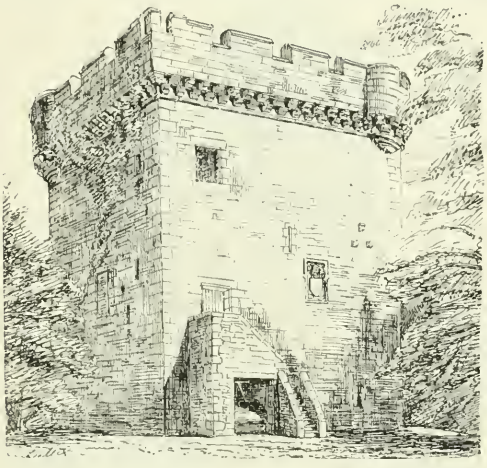


Fig. 251.—Inverkip Castle. View from the North-West.

CRAIGNEIL CASTLE, Colmonell, Ayrshire.

A rectangular tower, 42 feet by 30 feet, situated on the top of a rocky height on the south side of the river Stinchar, opposite the village of Colmonell. The hill being partly composed of limestone, has been quarried out as far as the base of the castle, an operation which has greatly increased the picturesqueness of its situation (Fig. 253).

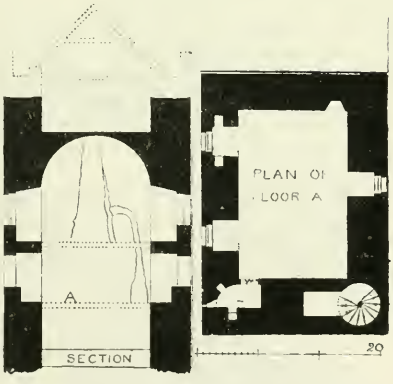


Fig. 252.—Craigneil Castle. Plan and Section.

This tower may belong to the fourteenth or fifteenth century. The walls are 6 feet thick. The entrance doorway is on the ground level at the south-east angle, where a newel staircase led to the upper floors (Fig. 252). A peculiarity here is that the basement has not been vaulted. There was a large hall on the first floor, but the principal hall was on the second floor, the roof of which is vaulted, and where remains of the great fireplace may still be traced.

Craigneil is said to derive its name from Nigel Bruce, King Robert's brother, but this tradition is very doubtful.

Fig. 253.—Craigneil Castle. View from the North-West.

This castle is now the property of William M'Connel, Esq. of Knockdolian.

KILKERRAN CASTLE, Ayrshire.

This is a fragment (Fig. 254) of the original castle of the Fergussons of Kilkerran, now represented by Sir James Fergusson, the sixth baronet. The estate was granted to the family in the fourteenth century, and, judging from the admirable style of workmanship, and the form of the simple parapet and corbel table, this keep was probably erected in the fifteenth century. It stands in a retired upland glen about one mile

from New Dailly, on the Girvan Water. It has been a good specimen of

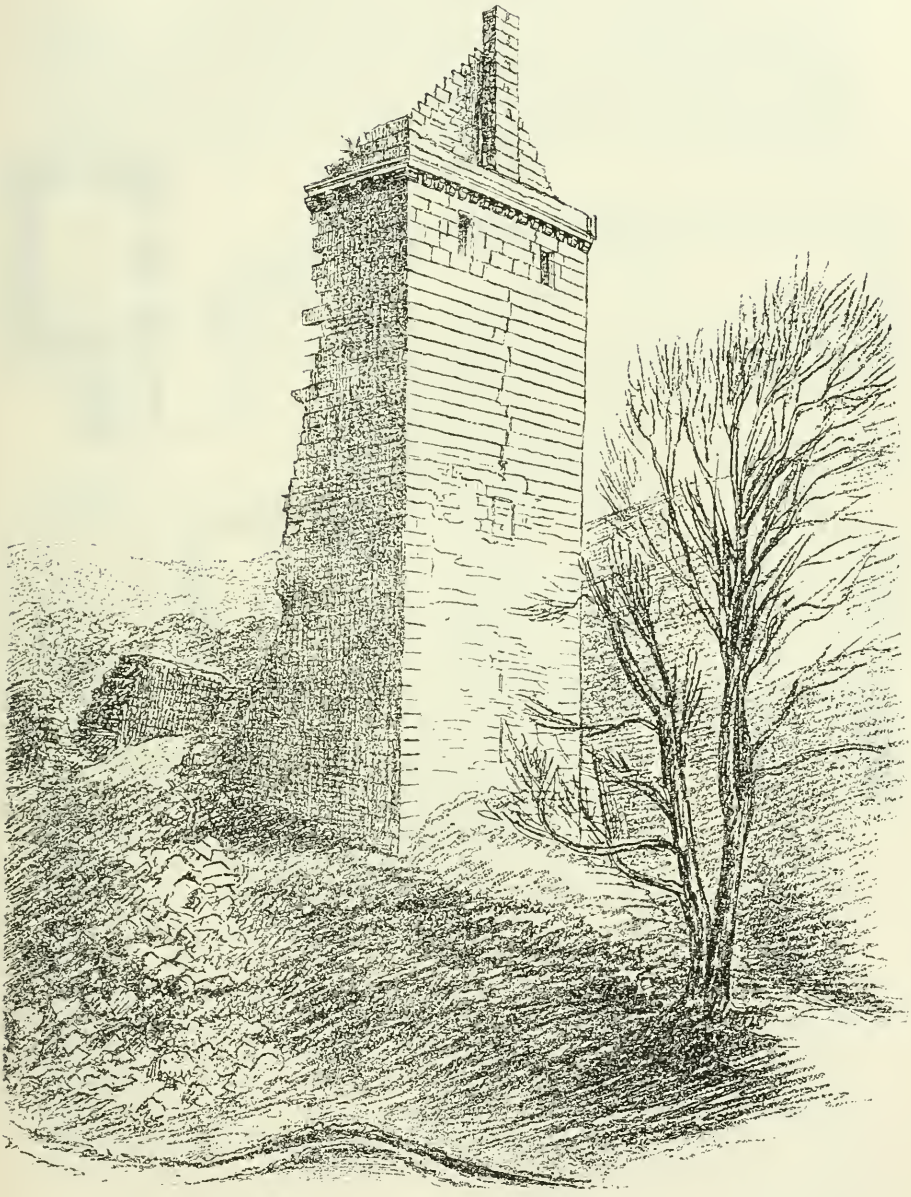


Fig. 254.—Kilkerran Castle. View from the North-West.

the keeps of the period, but it is unfortunately fast crumbling away.

WHITTINGHAM TOWER, Haddingtonshire.

This tower, which is in a state of perfect preservation, is situated about two miles from East Linton, in East Lothian. It stands near the edge of a steep bank, running along by the end of the platform for cannons, seen on the ground plan (Fig. 255). The tower is an oblong,

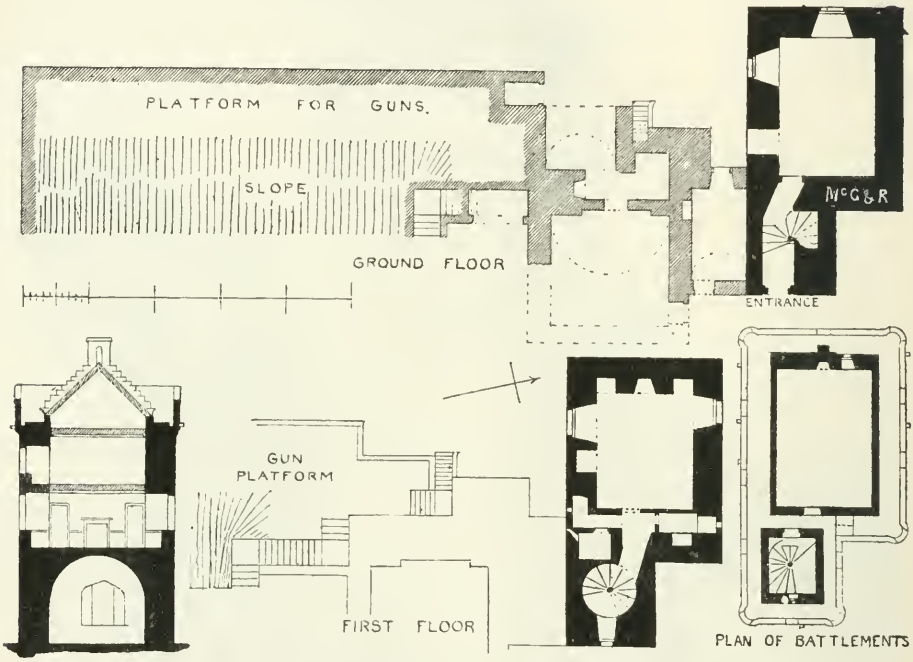


Fig. 255.—Whittingham Tower. Plans and Section.

measuring 31 feet by 23 feet 6 inches, and is 39 feet high to the top of the parapet. A square wing, containing the staircase, is projected towards the east from one of the narrow sides of the keep, which is contrary to the ordinary practice, the wings of the L plan being generally placed on one of the larger faces of the keep. The picturesque entrance doorway (Fig. 256), with large bead and hollow mouldings, having a shield with the Douglas arms carved on the lintel, leads to the vaulted ground floor, 13 feet 6 inches high. This was subdivided, the upper room having originally entered from the staircase, but it has been altered, and the door built up. The first floor, containing the principal apartment, about 18 feet by 15 feet, and 8 feet 9 inches high, is well lighted with two deeply recessed windows. This was originally the hall, and is interesting as still retaining, screened off at the entrance, the place anciently known as the "screens" for the service of the dining-room.

Entering off one of the "screens" is a small mural closet. The interior of this apartment has been renovated in the seventeenth century, and contains some good plaster and wood work of that period. The richly panelled ceiling of plaster-work (Fig. 257) is of similar design to those of Winton House, Moray House, and other seventeenth-century buildings. The door architraves, with egg and dart enrichment, are probably contemporary with the ceiling, and are certainly much later than the tower. The staircase continues to the top, and is surmounted with a cape house.

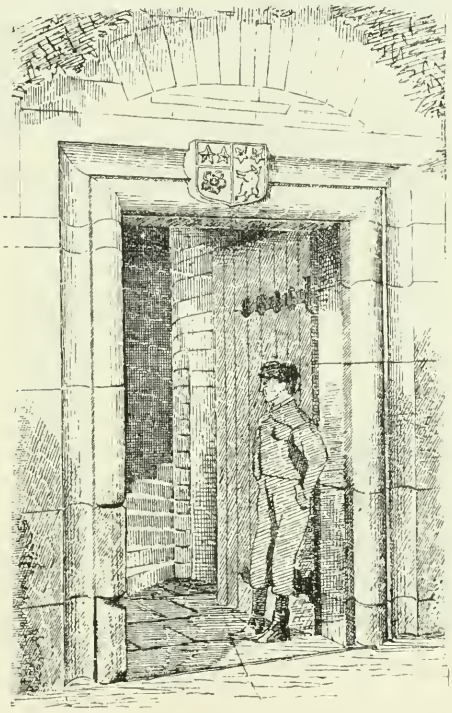


Fig. 256.—Whittingham Tower. Entrance Doorway.

The battlements are interesting, and are quite entire, with a walk all round about 3 feet wide, but intersected by a wall where the staircase joins the main tower, through which wall there is a narrow passage about 2 feet high. The parapets are high, and have a moulded coping with a double bead continued all round the embrasures. There is an apartment in the roof entering from the parapet walk. The windows of the tower, so far as visible under a prodigious growth of ivy, are designed like those of the fifteenth and sixteenth century Tudor buildings in England, of which we have also an example in the chapel windows of Craigmillar, with a wide splay and label mouldings. Extending south-

wards from the tower towards the steep bank there is a mound of earth about 10 feet high by about 80 feet long, having a retaining wall along the west side and south end, with a slope towards the east. This is of later date than the tower, and was doubtless erected for guns. The

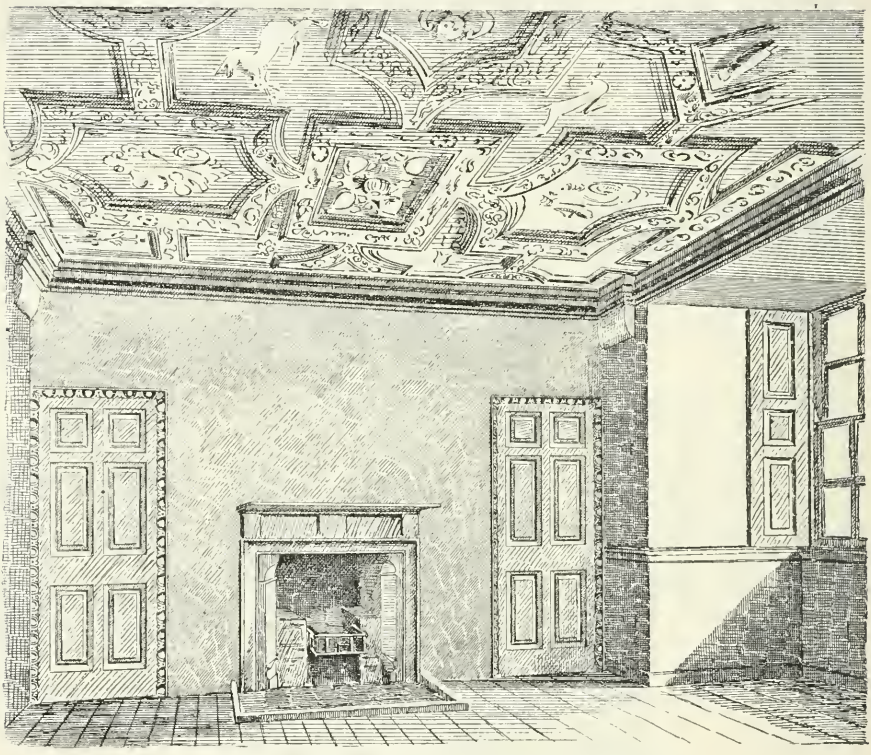


Fig. 257.—Whittingham Tower. Interior of Dining-Room.

mound stops short of the tower, and the space between is occupied with vaulted chambers of seventeenth-century work, shown hatched on plan. Two open staircases from opposite sides lead up to the mound, and there seem to have been apartments over the above chambers entering from the mound platform; but the whole of this addition is now very ruinous and indistinct. This tower (Fig. 258) is of superior design to many of the keeps of the period, the windows, parapet, etc., being somewhat ornate, and carefully finished. It corresponds, however, in details with many of the larger castles of the reigns of James IV. or V., at which period it seems to have been built. It is satisfactory to find that Whittingham Tower is well taken care of, for, as the scene of some important events in Scottish history, it is well worthy of preservation. It was here, in

January 1566-7, that the Earl of Morton came to visit his cousin Patrick Douglas, and was met by Bothwell, whose castle of Hailes, on the other side of Traprain Law, is within a short distance of Whittingham, and by Secretary Lethington, whose castle of the same name is likewise in the

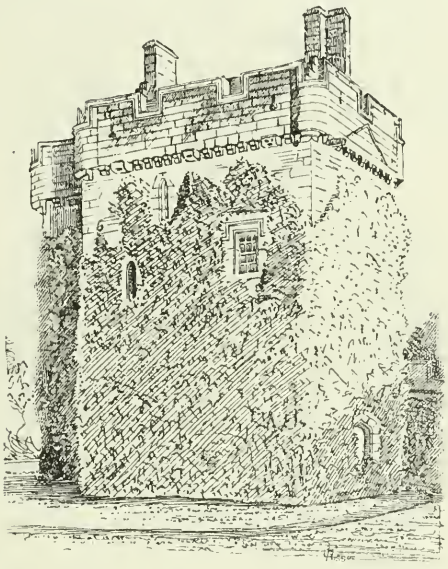


Fig. 258.—Whittingham Tower. View from the North-West.

neighbourhood, when the foul conspiracy for the murder of Darnley was first hatched and decided on. "And," says Tytler, referring to subsequent events, "it was only a year and a half before that in this fatal house, the conference had been held between Lethington, Bothwell, and Morton, in which the King's murder was determined. Bothwell was now a fugitive and an outlaw; but his associates in guilt, the same Lethington and Morton, now received Moray at Whittingham, and cordially sympathised with him when he expressed his horror for the crime, and his resolution to avenge it."

BALQUHAIN CASTLE, Aberdeenshire.

This ruinous keep (Fig. 259) stands in the parish of Chapel of Garioch, about half a mile from the church, and two miles from Inveramsay Junction, on the North of Scotland Railway. It was originally a quadrangular keep (Fig. 260), probably of the fifteenth century, which was destroyed in 1526 in the feuds between the Leslies (the proprietors) and their neighbours the Forbeses. The lower part of the walls is extremely thick, and has the deep recesses and the narrow loops then in use. The castle was rebuilt in 1530 by Sir William Leslie, seventh Baron of Balquhain,

probably on much the same lines as the older keep. Unfortunately so little of it now remains that it is scarcely possible to ascertain the disposition of the interior; but its massive and weather-stained grey walls

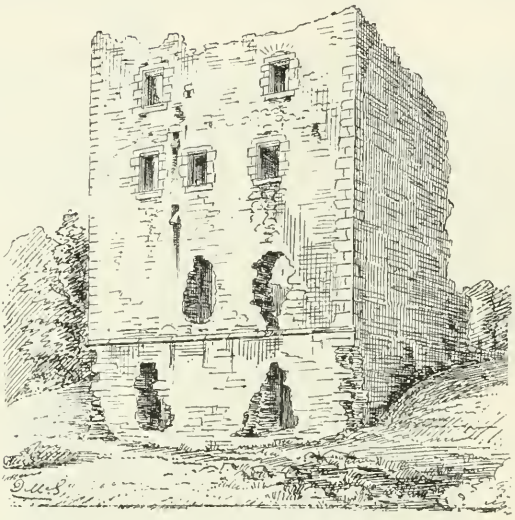


Fig. 259.—Balquhain Castle. View from the South-East.

have a commanding and impressive effect. The walls enclosing the barmkin, which occupied the highest part of a knoll, and some of the out-buildings, can still be traced (see Fig. 260).

Balquhain was the abode of Queen Mary the night before the battle of Corrichie, in 1562, and it stands within a short distance of the more

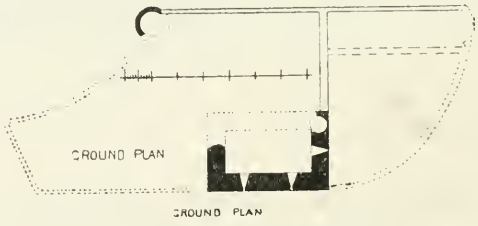


Fig. 260.—Balquhain Castle. Plan.

famous battle-field of Harlaw (1414). The castle was burnt by the Duke of Cumberland in 1746.

DARNAWAY CASTLE, Morayshire.

Of this ancient seat of the Earls of Moray little now remains; but fortunately, whilst almost all the masonry is new, the ancient oaken

Fig. 261.—Darnaway Castle. Interior of Hall.

roof (Fig. 261) of the hall has been preserved, and is a specimen almost unique in this class of work in Scotland. The open timber roofs of the Parliament Houses at Stirling and Linlithgow have entirely disappeared, as well as those of Doune, Dirleton, Tantallon, and all the larger castles of the fifteenth and sixteenth centuries. The fine roof of Darnaway, the smaller one of the House of the Knights of St. John in Linlithgow,[1] and that of the Parliament House, Edinburgh, are almost all that remain to give an idea of what these others must have been.

Darnaway Castle is situated on a rising ground in the midst of an extensive forest not far from the river Findhorn, and about three miles from Brodie Railway Station.

A castle was originally built here by Thomas Randolph, Earl of Moray, who was Regent during the minority of David II., and the present building is traditionally said to be Randolph's castle. It appears however from the Exchequer Accounts that the existing ancient hall was begun by Archibald Douglas, Earl of Moray, about 1450. The Earl being forfeited, the King allowed the building to be proceeded with in the style of grandeur and solidity which Douglas had contemplated (see the Accounts for 1456-58). In 1810 a large new castle was erected in front of the ancient hall, and connected with it, so that the hall forms part of the existing mansion. The walls have however been greatly altered. The old Statistical Account describes it before the alterations as an ancient pile 89 feet long and 35 feet wide, having a balcony in the outer end, with a music gallery above, from side to side. There was a large chimney in the opposite end, and another spacious fireplace on one of its sides.

The modern fireplace in the north side of the hall probably occupies the position of the latter, but the other fireplace and the balcony and gallery have been swept away.

All that now remains of the ancient hall is the open timber roof. It is well preserved, and is of fine dark oak. From its style it seems to belong to the latter half of the fifteenth century. In constructive design it somewhat resembles the roof of the hall of Edinburgh Castle, which was probably erected by James V. The design is in this respect rather weak. The principals of the roof are very varied in design, but they have all the fault, like those at Edinburgh, of not having a proper tie. They evidently belong to a late period of Gothic art; the variety of the forms of the rafters is in itself an evidence of this. The simplicity and purity of the earlier forms, of which so many specimens exist in England, is here conspicuously absent.

It is only in its general effect, not in detail, that this roof can suggest the probable appearance of those of a simpler and earlier style, of which we have a solitary example in the House of the Knights of St. John.[1]

We have however in the Parliament House and the Tron Church in Edinburgh good specimens of open timber roofs of a still later date.

[1] Demolished since the above was written!

BADENHEATH, Dumbartonshire.

Badenheath is situated not far from Moulinburn, in a detached part of Dumbartonshire, about nine miles east from Glasgow. It is now a mere fragment, being the southern half of an oblong keep (Fig. 262),

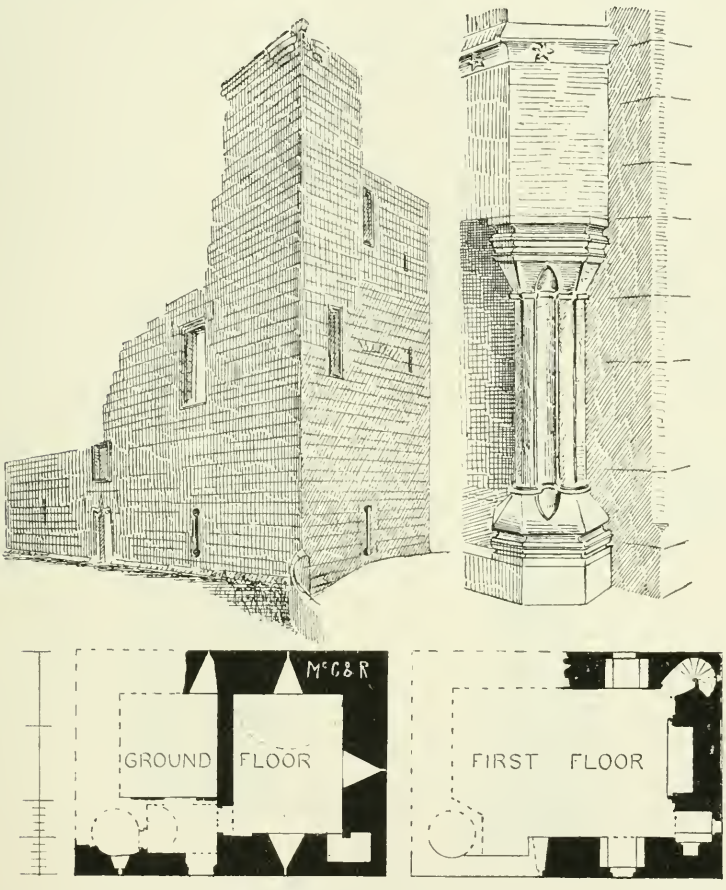


Fig. 262.—Badenheath. Plans and View.

probably of the end of the fifteenth century. It has been built of fine regularly coursed masonry, which has proved too strong a temptation to the needy builders of later times. This is much to be regretted, as from the style of work remaining, Badenheath has apparently been a fine example of a peel tower. The entrance doorway (with its bar-hole), fortunately preserved, is, as will be seen from the sketch (Fig. 263), of a remarkable and unusual design. The hall mantelpiece, which is also

entire, is finely moulded, of the style so frequently used in Scotland, as at Ruthven, Cardoness, Craigmillar, and other castles, while the little that is left of the windows, both inside and outside, with the corner turrets, corbelling, and stone cornice inside, show that this must have been a superior tower of its class. It measures 42 feet by 30 feet 6 inches over the walls, which are from 6 feet to 7 feet thick, and four stories high.

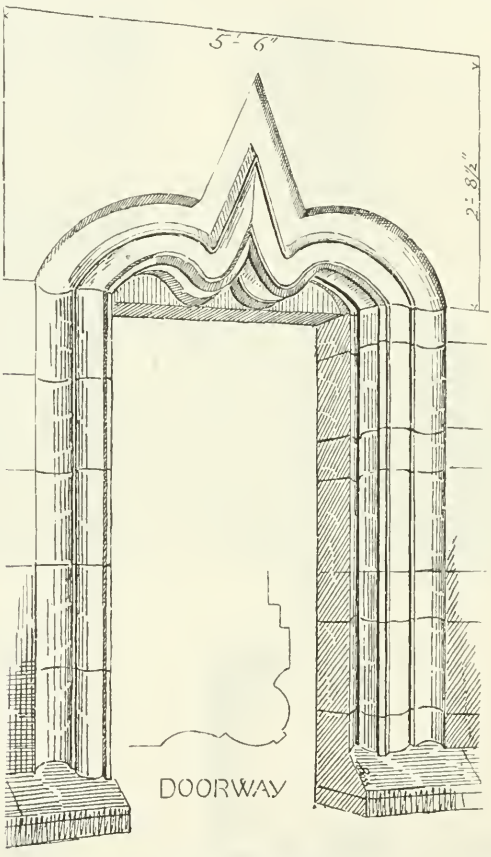


Fig. 263.—Badenheath. Entrance Doorway.

Adjoining the entrance doorway in the west wall, the wheel stair led to the first floor, where it terminated in the usual manner. In the south gable of the hall is the fireplace, already referred to, and adjoining it another wheel stair led to the upper floor and to the top. The southern room on the ground floor remains entire with its vaulted roof, and is lighted by three long narrow slits. In one corner will be seen on plan a small mural chamber on the floor level, 6 feet long by 3 feet 9 inches wide, and from 3 feet to 4 feet high, which was probably a sleeping-place.

CAIRNBULG CASTLE, Aberdeenshire.

Cairnbulg Castle, about two miles distant from Fraserburgh, in a southern direction, towers above the waste of sandhills and bogs (now mostly reclaimed) with which it is surrounded. Close by is the deep sluggish water of Philorth, which doubtless proved useful as a defence to the castle from the west, and for supplying water to flood the moat which at one time evidently surrounded the mound on which it stands.

The castle consists of buildings of two periods. There is first the large oblong keep, which probably dates at the earliest from the end of the fifteenth century, and the buildings of a later date, which have been so contrived as to convert Cairnbulg into a castle with diagonally opposite towers, the old keep being made available as one of these towers.

The keep is oblong on plan, with a projection for the wheel staircase at the south-east end (Fig. 264). It measures 41 feet in length by 29 feet 8 inches along the west end, and along the east end and staircase projection it measures 40 feet, with walls from 6 feet to 7 feet thick. The entrance doorway (now built up) was from the ground level on the east side of the staircase turret. The ground floor, as also the first floor, are vaulted with pointed vaults. There is no access to the portions of the building above the first floor, the place being in great ruin and the staircase gone. The hall, which is on the first floor, measures 25 feet 4 inches by 16 feet 7 inches, and is well lighted by four windows. The entrance to the hall is in the recess of the large end window. The other three windows are provided with stone seats, and off the one in the south-west corner there is a mural chamber about 10 feet by 6 feet. In the opposite corner of the hall another mural chamber, 5 feet by 2 feet 9 inches, has a stone sink opening to the outside. The fireplace is in the west gable, opposite the entrance. It is quite plain, having merely a bead moulding round the jambs and lintel. We are unable to say where the original kitchen was.

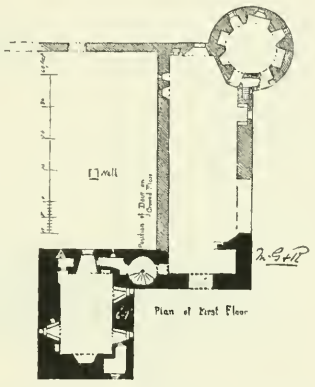


Fig. 264.—Cairnbulg Castle. Plan.

In the original castle there was evidently a curtain wall extending southwards from the face of the staircase wall for about 30 feet, and then running eastwards at right angles. On this wall have been built the later additions to the castle. The curtain wall was from 4 to 5 feet thick, and of great height, as seems to be indicated by a fragment of a row of small corbels seen high up on the east front (Fig. 265).

The building of the second period, shown hatched on plan, measures

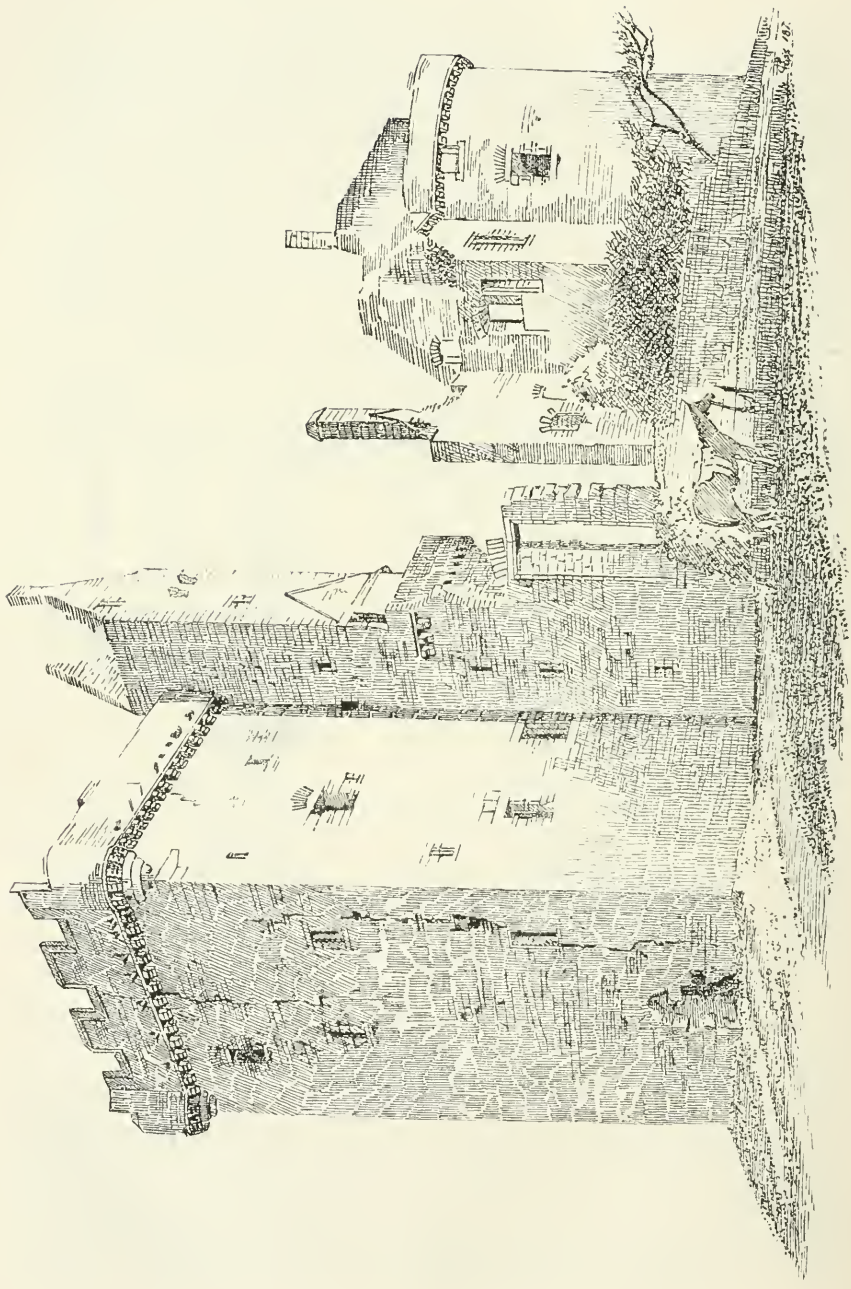


Fig. 265.—Cairnbulg Castle. View from the South-West.

from east to west 77 feet 2 inches by 29 feet in width, with a round tower about 27 feet in diameter projecting at the south-east corner. This tower has been four stories high, with probably an attic, but it is, like the keep, in a state of great ruin. The whole of the ground floor of the extended buildings, containing the kitchen, is vaulted, with rooms leading off a passage along the north side. The communication between the old and new house has been by a passage at the wheel stair, as shown on the plan. At the west end of the new house there seems to have been an anteroom, with a great window facing the west, inserted into the old curtain (see Fig. 265), and leading off this was the great hall or principal apartment in the house, about 59 feet long by 21 feet 2 inches wide. This room had probably two fireplaces. One is still remaining in the north wall near the east end, and the other in the wall at the west end is, in all likelihood, represented by the splayed recess, of which one side is seen on the plan.

Entering from the east end of this grand hall was a private room in the round tower, 16 feet diameter, lighted by four windows, having a fireplace and two square recesses in the walls. The plaster still remaining on the walls of this room is covered with painted ornament. From the entrance passage to this room a passage in the thickness of the wall leads to a garde-robe, and also to a narrow service stair leading down to the kitchen.

The access to all the upper floors is by the old staircase of the keep, which had steps of a width of about 4 feet 6 inches. The top of the staircase, as usual, contains a room at a great height above the ground. This upper room is possibly an addition, as at a lower level on the south side there are two projecting corbels, probably the remains of the corbels which supported a parapet walk at this level. Similar corbels, indicating a change in design, may be observed at Craigmillar and Glamis, the alteration at the former being almost identical with what took place here.

This noble keep is unfortunately in a very rent and torn condition. The parapet, with its open corbelled bartizans and embrasures, is evidently of the end of the fifteenth century. The corbel table of the south-east tower (Fig. 266), which is much later in date, has been executed in imitation of the older one.

In the year 1375 Cairnbulg, along with the barony of Philorth, passed into the possession of Sir Alexander Fraser of Corrie, on his marriage with Jean Ross, the youngest daughter and coheiress of the Earl of Ross. There seems to be no information as to when the keep was built, but it must have been at a considerably later period, probably about a hundred years after.

Part of the enclosing walls of the courtyard remain along the east side, with a fine arched entrance gateway (Fig. 266).

The later additions were built by Sir Alexander Fraser about the year

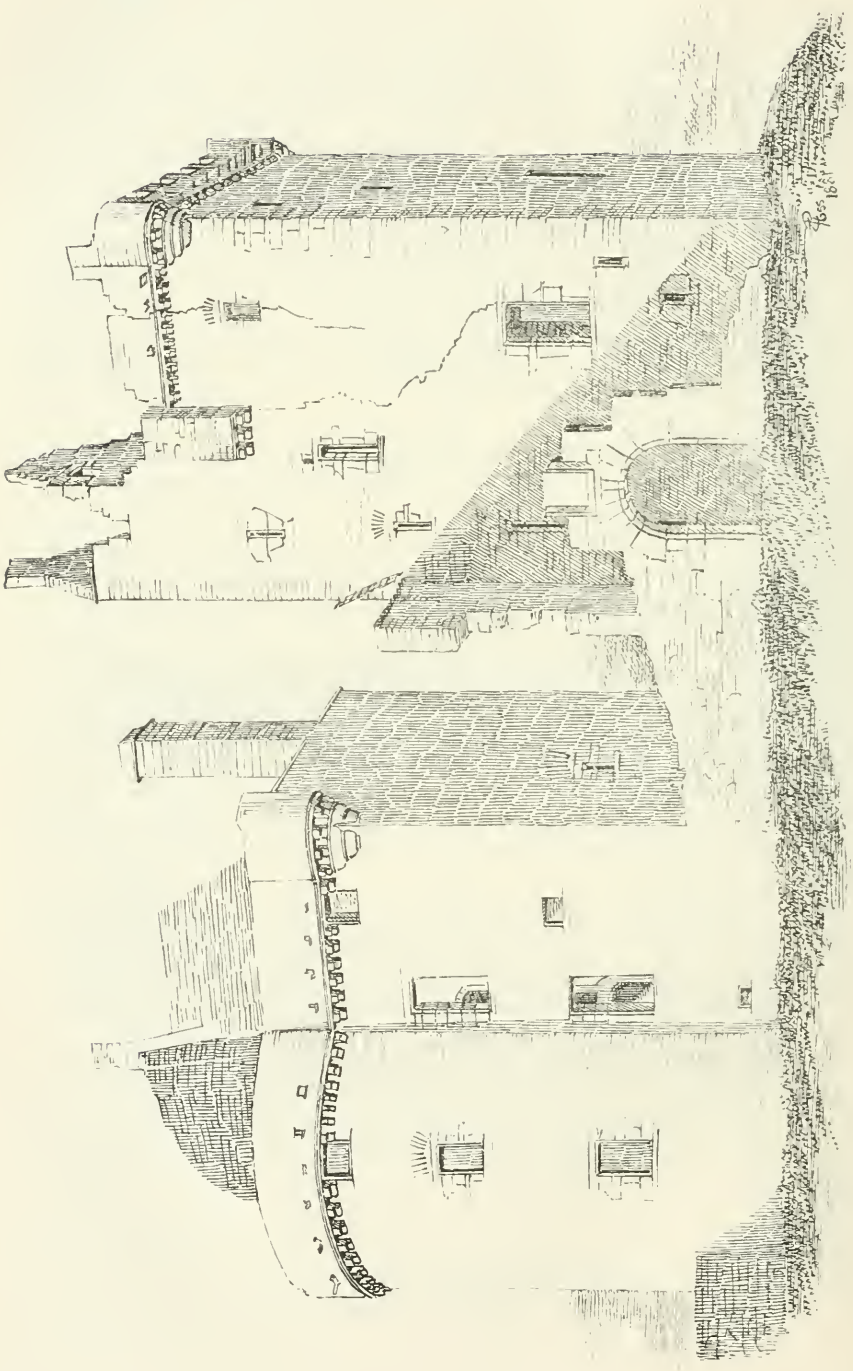


Fig. 266.—Cairnbulg Castle. View from the North-East

1545. This is the same Sir Alexander who is suggested by us as having built the Wine Tower at Fraserburgh. In 1619 his grandson and successor, Sir Alexander Fraser, who built the castle at Kinnaird Head, Fraserburgh, sold the lands and castle of Cairnbulg. Was this to enable him to raise the funds necessary for the pursuance of his scheme in founding the town and harbour of Fraserburgh? If so, and it seems not unlikely, the inhabitants of that rising town should regard the venerable walls of Cairnbulg with feelings of no ordinary interest.

The castle seems to have remained inhabited for a considerable time after this, as we gather from the following tombstone inscription in the neighbouring churchyard of Kirkton (Fraserburgh):—"Here lyeth the Body of George Marten, Lawful Son to James Marten, Presently Residing at the House of Cairnbulye, who died January the 8th the year 1781."

FARME, Lanarkshire.

An ancient square keep on the Clyde, near Rutherglen, now incorporated with a modern mansion (Fig. 267). It has the appearance of having been built in the fifteenth century, and is a good instance of the

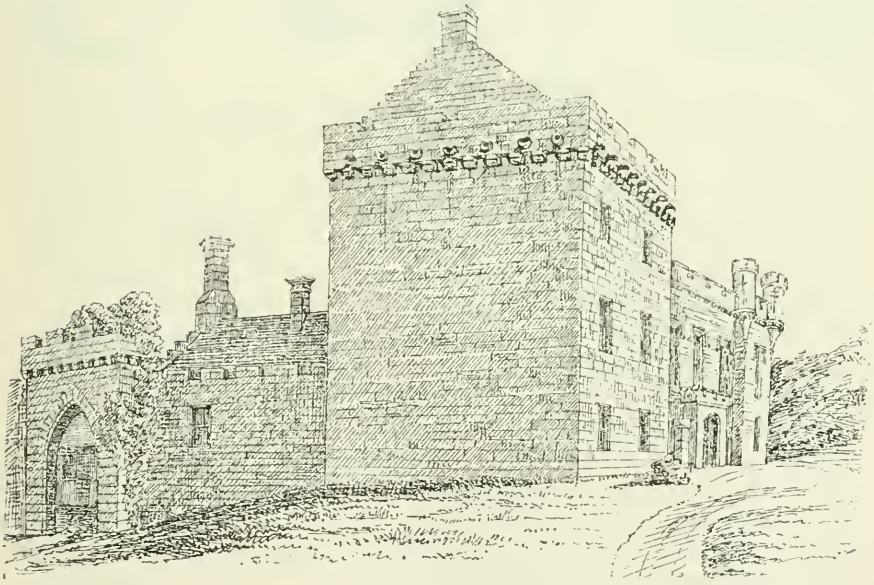


Fig. 267.—Farme Keep.

persistence of the simple keep style of building. The estate has belonged to the Stewarts, the Crawfords, and others, but it is not known by whom the castle was built. It now belongs to Allan Farie, Esq.

THIRD PERIOD—KEEPS WITH ONE OR TWO WINGS.

We shall now give some examples of keeps built during the Third Period on the L plan, *i.e.* with a wing at one end, or with two wings.

It will be observed that although these retain the general features of the plans of similar keeps erected in the fourteenth century, they generally exhibit more refinement and ornament in details. Some modifications of the plan, such as the insertion of a tower in the re-entering angle of the L to contain the staircase, are introduced during this period.

AUCHINDOUN CASTLE, Banffshire.

This massive ruin is situated on the top of a conical hill which rises in the centre of an amphitheatre of bare and barren mountains in Mortlach parish, Banffshire. It is about three miles from Dufftown, and lies on the way from Elgin into Aberdeenshire. A more desolate and lonely site for a dwelling can scarcely be imagined; but it seems from the earliest times to have been selected as suitable for a place of strength. The hill on which the present castle stands is surrounded with the remains of several wide and deep ditches, which have evidently been the defences of an early hill fortress. The steep banks sloping on three sides to the glen of the Fiddich, about 200 feet below, formed a good position for these primitive fortifications, and the hill was cut off from the adjoining ground on the fourth side by a wide fosse.

The castle is said to date from the eleventh century, but the present building does not appear to be older than the fifteenth century. It is reputed to have been rebuilt by Cochrane, the favourite of James III., and so far as its style goes, it might belong to that period. The castle came into the possession of the Gordons from the Ogilvies in 1535, and it is possible that it may then have undergone alterations, and the additions round the walls of the courtyard may then have been made.

It is now a very massive and imposing ruin, and has not been occupied for the last two hundred years.

This castle (Fig. 268), although built on the L plan, has not the entrance, as is usual, in the re-entering angle. The south or entrance front is demolished, but the door has evidently been near the staircase at the south-west angle. There is another staircase at the north-west angle, but it is smaller, and appears to have led to a postern doorway. The ground floor would enter from the level of the entrance doorway. It contains one large apartment, with elliptic barrel vault, and is lighted by one narrow loop at the north end. There is a stone sink in the west side, with drain, which would seem to indicate that this was the kitchen, but there is no fireplace. It may have been the cellar, in connection with which the sink would be useful. The other room on the ground floor in the

wing has been entered by a stair down from the hall, and may have been the private cellar. The walls are 8 to 10 feet in thickness.

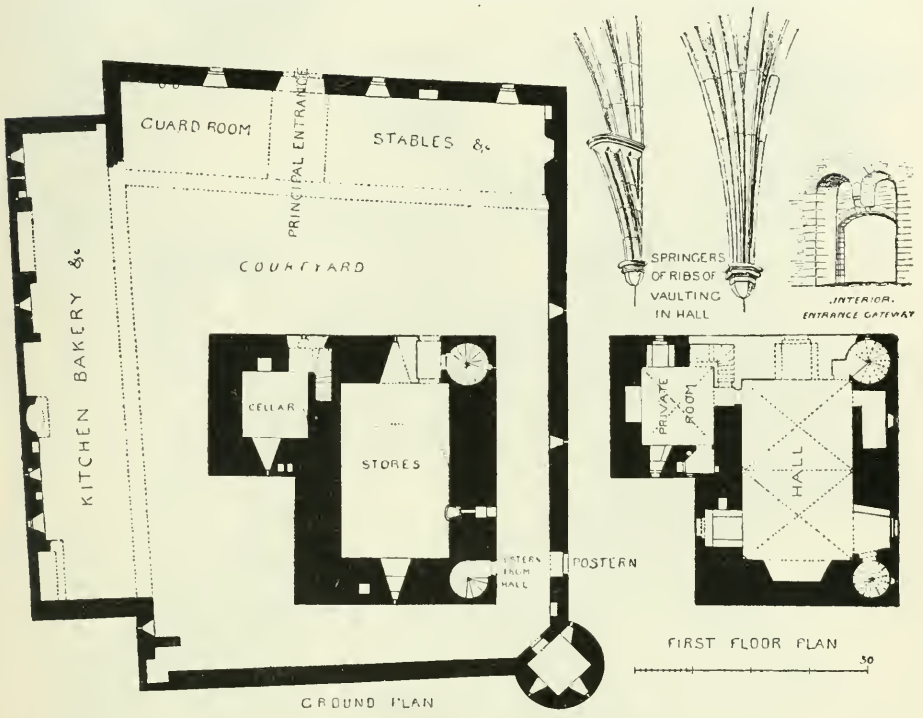


Fig. 268.—Auchindoun Castle. Plans and Details.

The first floor is occupied with the hall, 30 feet 6 inches long and 19 feet wide (Fig. 268). It has a large fireplace at the north end, and two windows in the east and west sides, near the fireplace, with stone seats in the recess. The east window has a cupboard, and the west window a door to the postern stair in the thickness of the wall. At the entrance from the principal stair there is a small guard-room in the thickness of the wall.

The room in the wing on this floor has been the private room, with garde-robe, windows with seats, etc.

The most remarkable thing about the hall is the vaulting. This is not of the usual barrel form, such as we find at Borthwick and Craigmillar, but has been groined and ribbed in two bays. The springings of the arches still remain (see sketch, Fig. 268), showing that they were of good form, and were supported on corbels. The central springing is carefully managed, and the mouldings are good, but the angle groin has not been so successfully set out, and an intermediate cap has had to be introduced to enable a fresh start to be made.

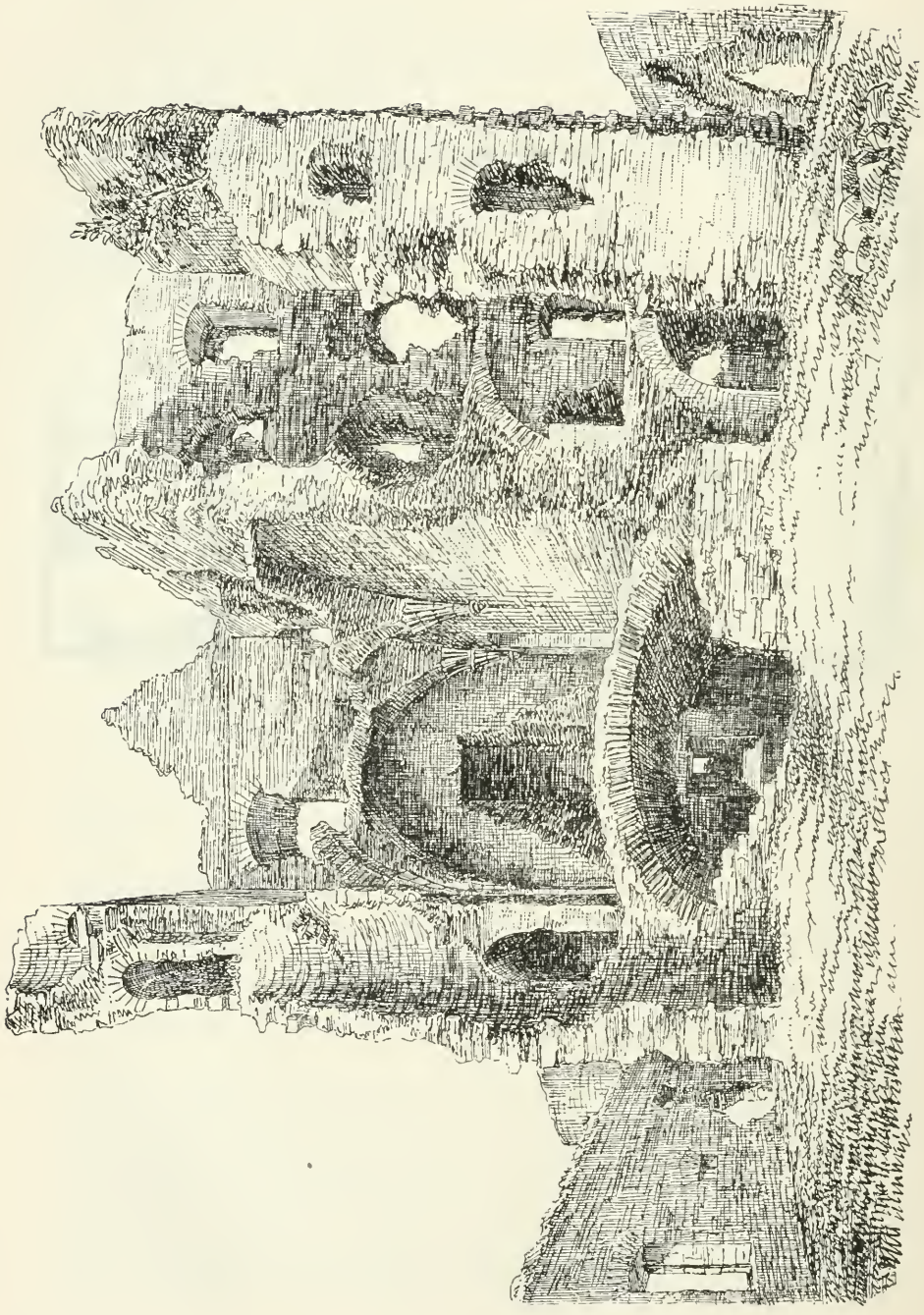


FIG. 269.—Auchindoun Castle. View from the West.

The floor above the hall has evidently been an upper hall with large windows, but it is now inaccessible. In the wing there were two stories in the height of the hall, and other rooms above. It is not clear whether these had a separate stair from the hall, or whether they were approached by passages in the thickness of the walls leading from the staircase in the south-west angle. The latter was the plan adopted at Crookston, and probably here also.

The whole character of the building, including its massive walls, with closets, stairs, and passages in their thickness, the vaulted hall, with its stone-seated windows and great fireplace, all seem to point to its being of about the same period as Borthwick, or towards the middle of the fifteenth century.

The castle has been surrounded with a high wall enclosing a court-yard, along the east and south sides of which there have been extensive ranges of buildings. The original plan seems to have contemplated buildings along the south wall, where the entrance gateway, with its remarkable arch (sketch, Fig. 268), is situated. These no doubt contained a guard-room, stables, etc.

The range along the east wall, however, appears to be of more recent date, and to have been pushed out beyond the original wall. From the large fireplaces, ovens, etc., still remaining, these buildings have evidently contained the kitchen offices. The round tower at the north-west angle, with shot-holes enfilading the walls, is also an addition of late date.

PRESTON TOWER, Haddingtonshire.

Preston Tower, for many ages the property of the Hamilton family, to whom it still belongs, has some peculiar features. The ground floor is unconnected with the rest of the building save by a trap in the vault. The main entrance to the tower is by a circular-headed doorway (now cut square) on the first floor (Fig. 270), and the defences of this door seem to have been of a rather remarkable kind. There are corbels over the door, and also round the corner on the south side of the tower, which, together with the apertures for joists at the floor level, appear to indicate that there has been a projecting wooden hoarding, with lean-to roof, round this part of the tower. The moveable stair for access would be lowered from this hoarding, which would also form a passage with a door, to give additional security to the entrance. A recess for this door, when open, is visible at the south-east angle of the building (Fig. 270). The stair to the upper floors enters from the recess (Fig. 271) of the door in the south wall entering from this outside passage, so that access to the stair could be got directly from the passage without passing through the hall.

The two immense corbels at the parapet immediately over the main doorway were also no doubt intended to carry a wooden platform, which

would project beyond the hoarding at the door, and thus give additional protection at this point. The parapet above the corbels being of late work, unfortunately nothing remains but these corbels to indicate the

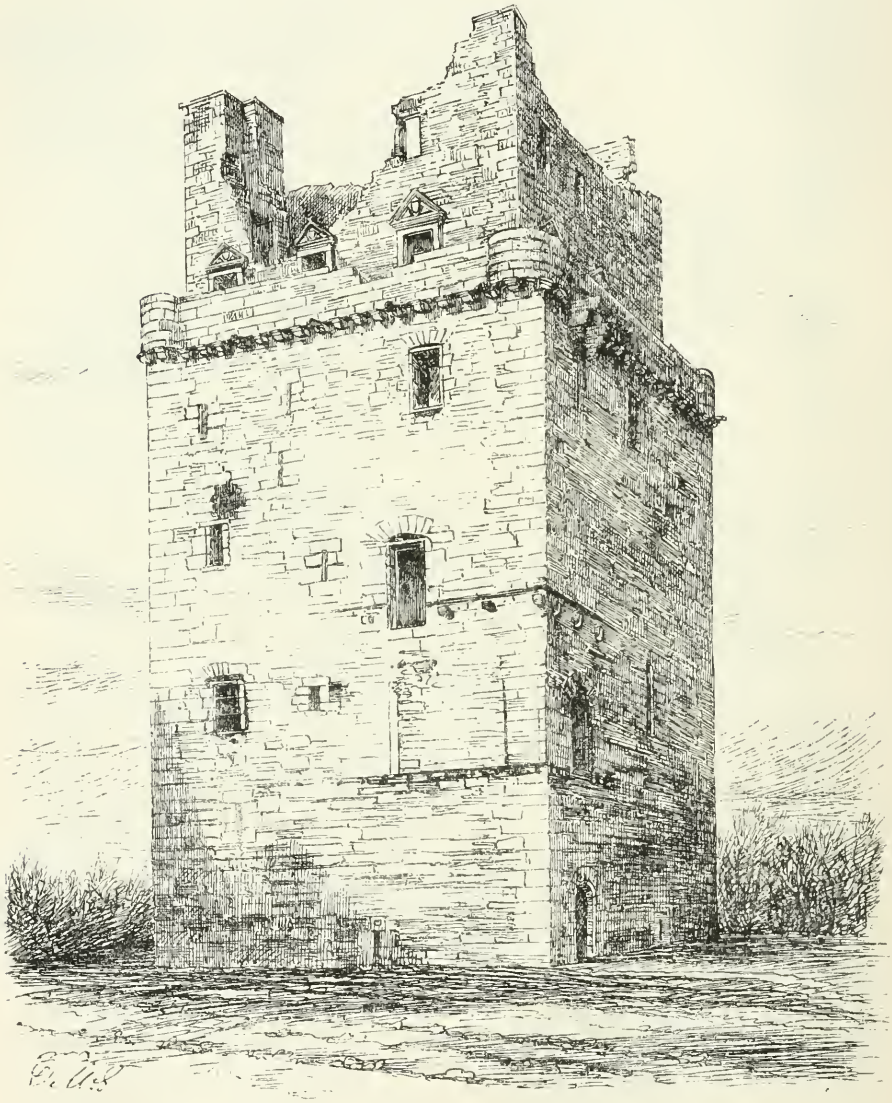


Fig. 270.—Preston Tower. View from the South-East.

nature of the hoarding which was supported by them. The general plan (Fig. 271) is of the usual kind. The basement contained stores, with loft in the vault. The first floor, which is also vaulted, contained the

hall, with its usual arrangements, and an additional story in the vault. The private room is in the wing. The arrangement of what appear to have been the guard-room and dungeon of this tower is peculiar, and, so far as we know, unique. Under the floor of the passage leading from the hall to the private room, there is a straight stair down to the flat below the private room (see Section). This stair must have been entered from a hatch in the passage floor, as it still is. There is also a smaller hatch in the floor of the private room leading to the room below. From

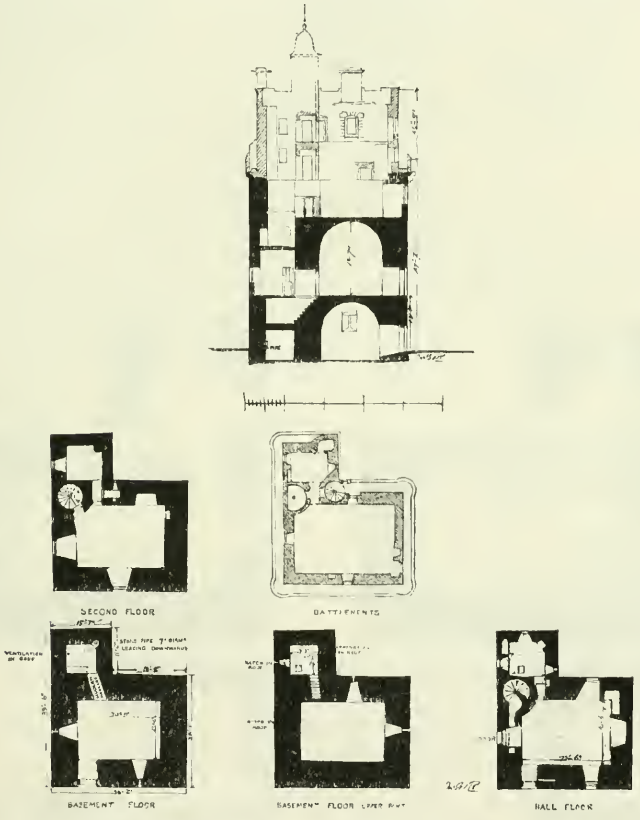


Fig. 271.—Preston Tower. Plans and Section.

this lower room there is a larger hatch to a similar room on the basement floor, which had no other means of access, the existing door on the basement floor leading to the cell in the wing being modern. This basement cell has apertures in the vault, apparently for ventilation, and a curious shaft or tube, 7 inches in diameter, recessed in one corner. Various theories have been started with regard to the use of these cellars; but it seems most in accordance with the customs of the time to regard the

first cellar as a guard-room, and the second or deepest pit as the dungeon. The drain above referred to, and the openings for ventilation, favour this view. At Dirleton Castle there is a similar arrangement of guard-room and dungeon under the owner's private room.

There was a fair amount of private accommodation in the original upper flats, but it was found desirable to extend it in the seventeenth century, when the whole building was raised by a couple of stories built above the parapet.

There was thus a new house built on the top of the old one, in a totally different style of architecture. Hence the peculiar telescopic effect of the elevation.

The arrangements of the plan, and the details of the corbels, etc., show that this castle belongs to the fifteenth century.

CASTLE HUNTLY, Perthshire.

This castle occupies a prominent site in the middle of the Carse of Gowrie, being situated on a mass of rock which rises on the west side

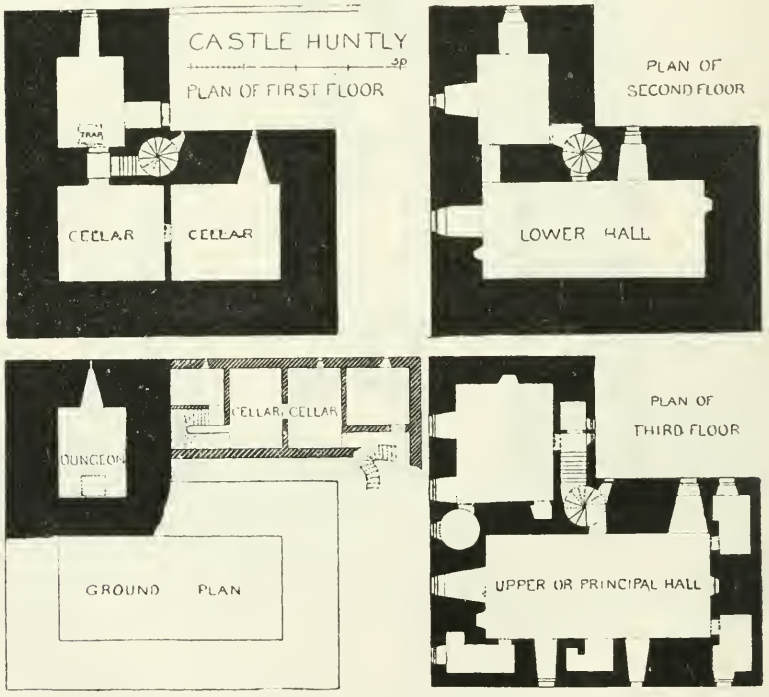


Fig. 272.—Castle Huntly. Plans.

abruptly from the plain, and slopes gradually down towards the east.

The castle is thus a striking object in the level carse, although externally it has been greatly modernised.

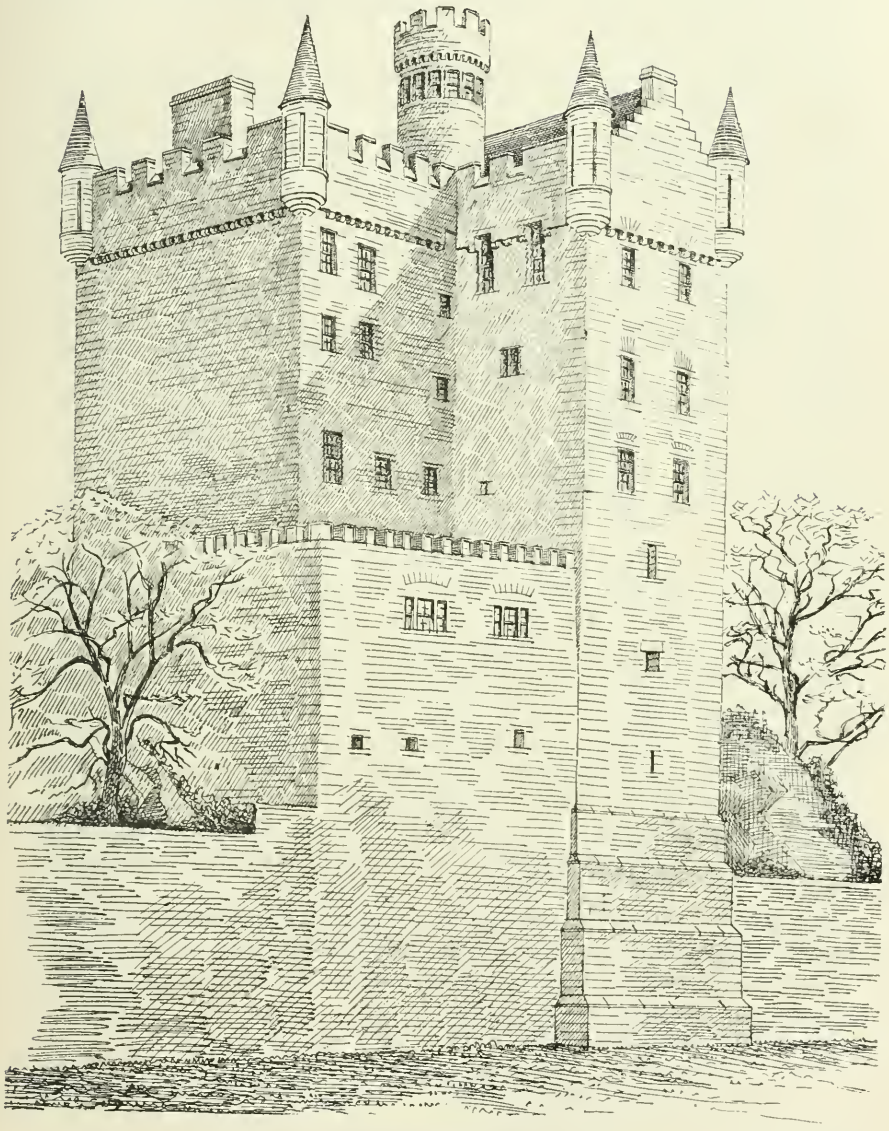


Fig. 273.—Castle Huntly. View from the North-West.

The original castle dates from about 1452, when a Royal licence is said to have been granted for its erection to Andrew, second Lord Gray of Foulis. This statement of the writer in the old Statistical Account is

called in question, but however that may be, the castle seems to belong to the latter half of the fifteenth century. It has however been so much altered and added to that it is now somewhat difficult to determine its pristine features.

The original plan is of the L form, with entrance on the first floor (Fig. 272) in the re-entering angle, where the original beaded doorway still exists. The ground, with a passage round the west side of the main body of the keep is now made up to the level of the doorway, although originally the door was most likely at least one story above the ground. The door enters into a vestibule or guard-room in the west wing, beneath which, and entered by a trap in the floor, is the vaulted dungeon, with a small loop to the open air high above the ground, as seen in Fig. 273. The buildings which now fill up the space at the re-entering angle are cellars, etc., added at a later date. A pointed doorway leads from the guard-room into the cellars in the main building, and also to the newel staircase in the thickness of the wall. The walls of the keep are all about 10 feet thick. The staircase is carried up to the roof, and gives access to every floor. The third Earl of Kinghorn is said to have excavated this staircase out of the solid wall. It appears however to be original, at least for the first two stories, but on the third floor there is a circular well in which a stair may formerly have existed for the service of the upper floors. The second floor contains a lower hall, with a room in the wing, and the third floor contains the upper or principal hall, with a private room in the wing. These floors are now cut up with partitions, and entirely modernised, but the old garde-robes and wall chambers can still be traced.

In 1615 the estate was acquired by Patrick Lyon, first Earl of Kinghorn, and in the latter half of the century the castle was much added to and "improved" by his grandson, the third Earl of Kinghorn and first Earl of Strathmore, who also "improved" the castle of Glamis. He likewise erected gateways in the Renaissance style (one of which still exists), and adorned the grounds with statues, in the same manner as he did at Glamis.

In the end of last century the estate was sold to George Paterson, Esq., who added a modern mansion to the east side of the old keep, and renovated the exterior with the modern sham turrets and battlements which it now exhibits.

GIGHT, or FORMANTINE CASTLE, Aberdeenshire.

This castle, now a shapeless ruin, was formerly celebrated for its great strength, to which the thickness of its crumbling walls still bears witness.

It occupies a strong and commanding site on the summit of the "Braes o' Gight," which rise precipitously from the river Ythan, about three miles from Fyvie.

The estate became the property, in 1479, of William Gordon, third son of the second Earl of Huntly, and the castle is supposed to have been built by him.

The House of Gight descended in his family till it belonged to Catherine Gordon, the mother of Lord Byron. It was purchased from her by Lord Aberdeen in 1787.

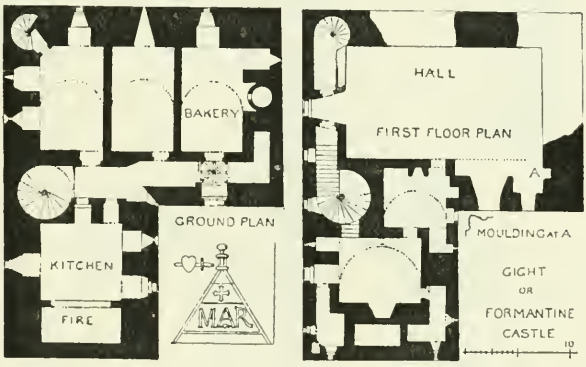


Fig. 274.—Gight, or Formantine Castle. Plans.

The plan of the ground floor is well preserved, and is somewhat remarkable (Fig. 274). It is on the L plan, but the door enters in the centre of one limb, and has a long passage running right through the building to the staircase, which is in the centre of the back wall. The same arrangement may be observed at Craig Castle. From a bend in the passage a shot-hole commands the entrance door. In the vault of the lobby adjoining the door there is a small compartment of ribbed and groined vaulting, which is a feature peculiar to several castles in Aberdeenshire. The kitchen has the usual large fireplace, and a service window to the stair. The other apartments, which are vaulted, were bakehouse and cellars, one having the private stair down from the hall. The hall, which occupies the principal portion of the building on the first floor, was a spacious apartment, 37 feet by 21 feet. It is entered in a peculiar manner by a straight stair, through one of the window recesses, the stair to the cellar, which was also continued up to the upper floors, also entering from a similar door in the opposite side of the window recess. A small vaulted room is obtained between the hall and the private room, and the walls of the latter are riddled with wall chambers in the manner common in the fifteenth century.

From the thickness of the walls, and the number of wall chambers and other features, this castle evidently belongs to the fifteenth century, although probably it was remodelled at a later date. The remains of the tympanum of a dormer window still existing (see sketch) seem to point to this.

NIDDRIE CASTLE, Linlithgowshire.

Niddrie Castle is familiar to the thousands who travel by rail between Edinburgh and Glasgow, from the glimpse obtained as the train emerges for a moment from the long rocky defile some three miles east of Linlithgow. The castle stands on a hillock, once skirted by a burn along the north-west, as shown on the sketch (Fig. 275). This, which must have been a considerable protection on the side of the entrance, has been diverted to suit railway purposes.

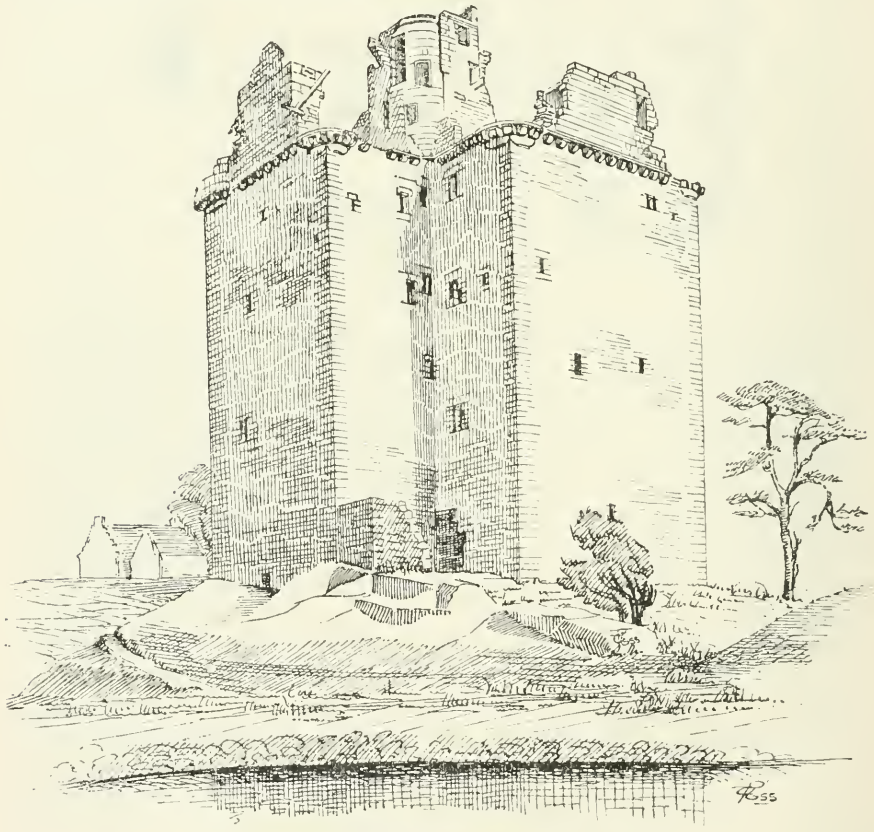


Fig. 275.—Niddrie Castle. View from the North-West.

The building is of the L plan (Fig. 276), and is quite empty, ruinous, and roofless. The door at the re-entering angle is protected in front by a wall of probably later construction than the castle. It opens into a lobby giving access to the main building, which measures inside 30 feet 9 inches by 18 feet 3 inches, and leading off this is a dark vaulted

chamber or dungeon in the wing, measuring 11 feet by 9 feet 9 inches. This dungeon is two stories high, and vaulted. The upper floor was of timber, resting on corbels, and entered from the wheel stair. It was

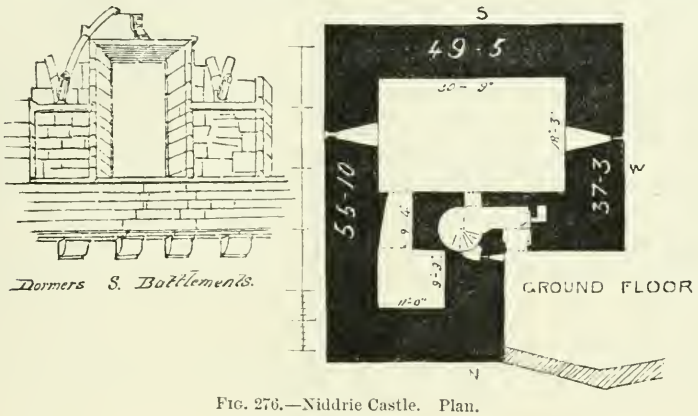


Fig. 276.—Niddrie Castle. Plan.

lighted with a long narrow slit, having a shot-hole beneath. The walls are on an average 9 feet thick. A corkscrew stair adjoining the door leads to the top, but the steps are nearly all gone, and the floors, which were all of timber, are wanting. The stone corbels for supporting the floors

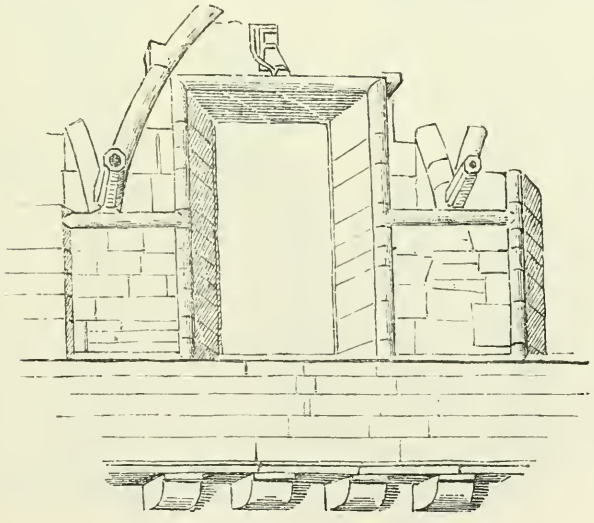


Fig. 277.—Niddrie Castle. Window of Upper Story.

still remain. The great hall, on the first floor, had a large fireplace at the west end, but it is entirely gone. When increased accommodation was wanted at Niddrie, security from attack was evidently of greater

consequence than convenient arrangement of plan, so, instead of extending the walls, the proprietor rather added a story or two to the already lofty keep. The building had originally a parapet walk round the top, the corbel table of which still remains, and the roof probably rose at once above this, as at Elphinstone, Whittingham, and many other places. The parapet was now raised as the wall of an additional story, and thus a feature was created which afterwards became the usual form of the upper floors of later designs. Some of the windows of this raised portion are deeply recessed and splayed outwards, as shown on Fig. 277. They resemble in these respects the east windows of Linlithgow Palace, built about 1500. They seem to have had pointed arched pediments of a curious and unusual design.

Niddrie, or Niddrie Seaton, to give the full designation by which it was anciently known, was built by George, fourth Lord Seaton, who fell at Flodden in 1513. The castle and lands remained in the same family till the time of Charles I., when they passed into the possession of the Hopes of Hopetoun, the ancestors of the present Earl of Hopetoun.

CRAIG CASTLE, Aberdeenshire.

Situated in a romantic and strong position on the rocky bank of a remote glen in the parish of Auchendoir, Craig Castle has for centuries

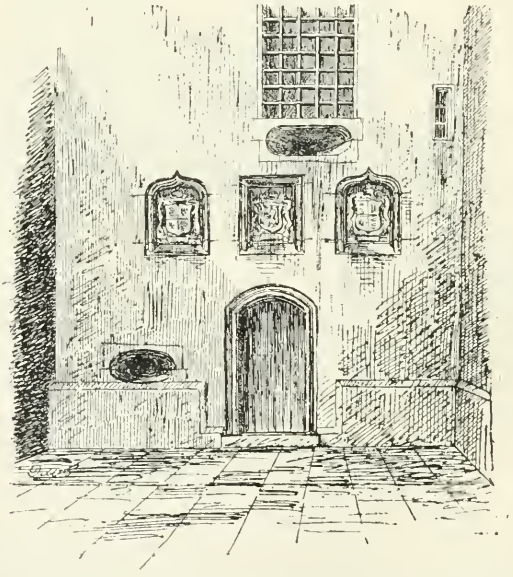


Fig. 278.—Craig Castle.

been the residence of the ancient family of the Gordons of Craig. The

present castle was begun by Patrick Gordon in 1510, and completed by his son William in 1518, as recorded, along with their coats of arms, on the walls (Fig. 278).

The castle is designed on the L plan, but the entrance door is not as usual in the inner angle, but a little way off the angle, and with the coats of arms and deep embrasures adjoining it has a striking effect (Fig. 278). It opens into a passage which goes right through the building to a newel staircase leading to the upper floors, in the same way as at Gight Castle. The basement contains three vaulted cellars, one of which has a stair to the hall, and one was probably the kitchen. The hall, with private room, as usual, occupied the whole of the first floor. The building has been much altered internally, but the widely splayed port-holes in use at that time are still visible externally on the different floors (Fig. 279).

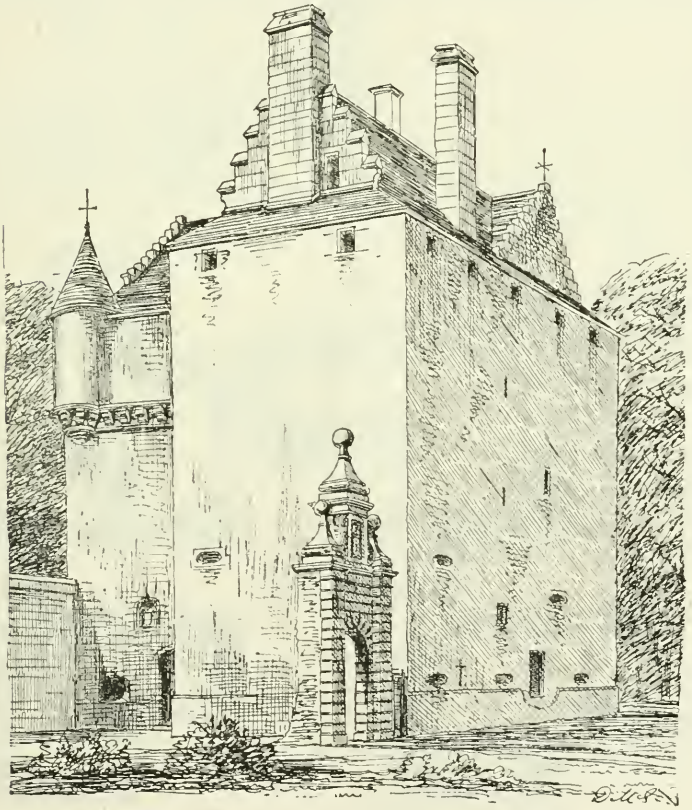


Fig. 279.—Craig Castle. View from the North-East.

The arrangements of the upper part of the building are peculiar. A roofed-in passage goes all round the castle at the top of the walls, and thus provides a covered parapet for defence (Fig. 279). The rooms on

this floor are lighted by borrowed lights in the inner wall of the passage. This arrangement seems to have been original, as the corbels for the wall plate of the roof of the passage, and the water table above, are carried all round the top floor. Portions of the inner walls of the parapet or passage are carried up as gables, and have the appearance of rising through the roof.

The top story is unfinished, and has been altered by the introduction of chimneys, etc., which block the covered passage at intervals. The roofs have the rather unusual finish of gabled crow-steps on the skews. These are more frequently found in connection with ecclesiastical work, although sometimes met with in castles, as at Edinburgh Castle, Farnell Castle, etc.

The old church of Auchendoir is close to Craig Castle. It has a good doorway and other first pointed features.

DUNDAS CASTLE, Linlithgowshire.

Dundas Castle, near the village of Dalmeny, and about eight miles west from Edinburgh, is in a good state of preservation so far as its masonry is concerned, but having been about the beginning of this century fitted up as a distillery, its interior arrangements are in

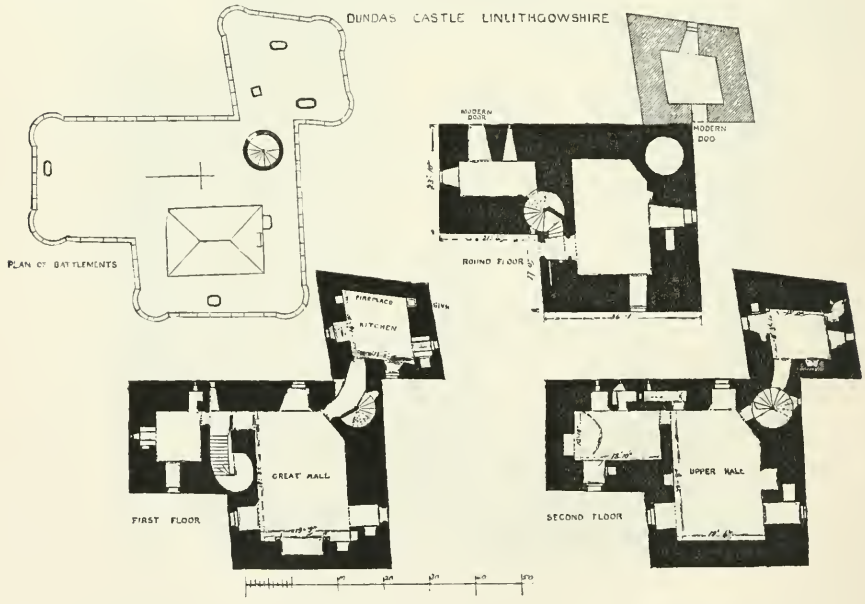


Fig. 280.—Dundas Castle. Plans.

various places concealed by the brick erections connected therewith. The castle stands on the summit of a rocky hill, and externally it pre-

sents the appearance of being all of one age. It is only after making a plan, and carefully studying the building, that it is found to be of two periods. The original building is on the ⌊ plan (Fig. 280), with two rooms, one in each compartment, on the various floors. It is four stories in height, all the floors in the wing being vaulted, while in the main building the basement and top floors only are vaulted (section, Fig. 281). In the addition

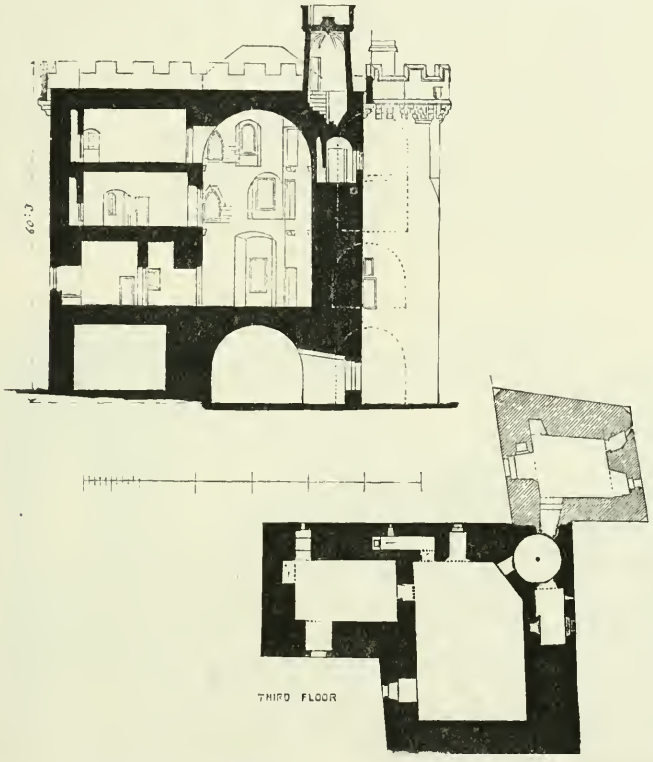


Fig. 281.—Dundas Castle. Plan of Third Floor and Section.

(to be afterwards described) three of the four floors are vaulted. The entrance door, which is round arched, is in the re-entering angle. In order to increase the head-room, the haunches of the arch have in recent times been cut out to the square, and the width of the passage to the stair has been increased to the extent of cutting away the masonry containing the rest or mortice for the sliding bar. The original strong iron yett still hangs in the doorway. A circular stair in the angle leads to the first floor, and terminates there. This stair has been altered from a corkscrew to a straight flight for the upper ten or twelve steps, in the manner shown on plan. The hall on the first floor is 28 feet 8 inches long by 19 feet 9 inches wide. The fireplace (Fig. 282) is of an unusual design, with its putt-stones for resisting the arch thrusts. This feature was not uncommon in earlier

examples, when the putt-stones were sometimes elegantly carved as sconces to receive lamps, etc. Adjoining the hall is a private room, which was previously of the same size as the room above, but has been considerably reduced in size by the alteration of the stair just described. This room and the great hall formerly entered directly from the circular stair, and not as at present. In the various floors there are garde-robes in the west wall. In order to reach the stair leading to the upper floors the great hall has to be crossed. This staircase is circular, placed in the angle, and continues up to the roof, where it lands in a large round turret with a groined ceiling inside. Above this vault, and reached by a ladder from the main roof, is the post for a beacon light and watch tower surrounded by a stone parapet (section Fig. 281). The beacon light could be seen at Blackness Castle, Rosyth Castle, Fordel Castle (where an iron beacon still remains), Dunfermline, Donnybristle, and various other castles along the Forth.

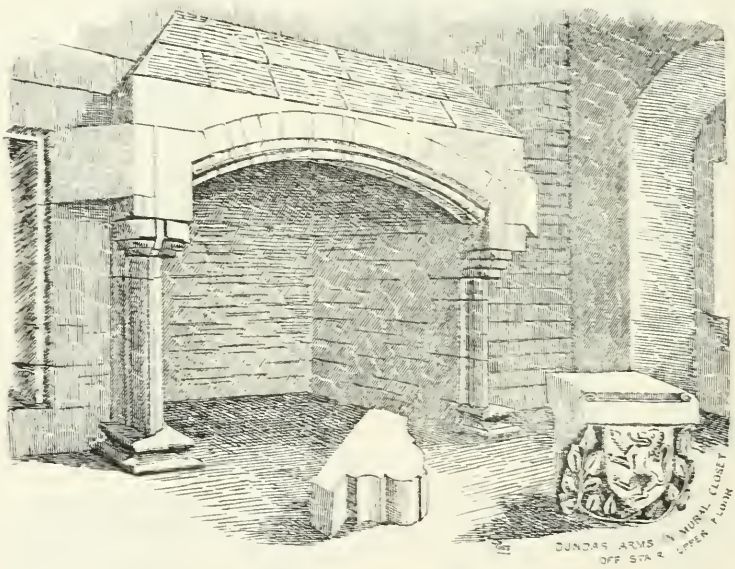


Fig. 282.—Dundas Castle. Fireplace in Hall.

The addition to the castle consisted of a wing at the north-west corner. Its peculiar and irregular shape seems to have been a necessity of the rocky site: its sharp corners, as will be observed (Figs. 283, 284), are splayed off towards the top. The various floors are reached from the staircase last described. How the ground floor was reached cannot at present be determined, owing to building and other alterations connected with the distillery: the circular well of the staircase seems to be con-

tinued down to the ground, and probably in this way an access was obtained. The kitchen is on the first floor of the new wing, and contains the usual stone sink. The fireplace has been entirely removed.

The roof is at present a flat platform covered with cement; in its original state it was in all likelihood constructed of stone flags resting on the vault, somewhat like the roof of Craigmillar, with an inclination just steep enough to let the water run off. It will be observed from the section that the parapets rise above the crown of the arches of the roof, so that there was no necessity for steep roofs, as in the case of Borthwick and others, where the parapets are placed at the springing of the arches. The machicolations between the corbels have been all filled up during the recent repairs. There is a small low penthouse near the centre of the roof, probably used as a guard-room (Plan of Roof, Fig. 280).

Fig. 283.—Dundas Castle. View from the North-East.

The family of Dundas of that Ilk were in possession of this barony since about the beginning of the twelfth century down to a few years ago. The present castle was probably erected during the first half of the fifteenth century, when, about 1416, a fortalice seems to have been erected under a warrant from Robert, Duke of Albany. The additional wing being so exactly in the same style, as to height and all other features, we may conclude that it was built not long afterwards, and that the subsequent warrant which was granted by James I. in 1424 refers to it.

We have in Dundas Castle a good example of the L plan, and also a good illustration of the efforts which were made in the fifteenth

century to extend the accommodation. No sooner apparently was the castle built than it was found to be too small, and the awkwardly shaped north-west wing had to be added to provide a kitchen, as well as additional chambers. That this is an addition is evident from the way in which the doors leading to it from the staircase have been slapped in the original wall.

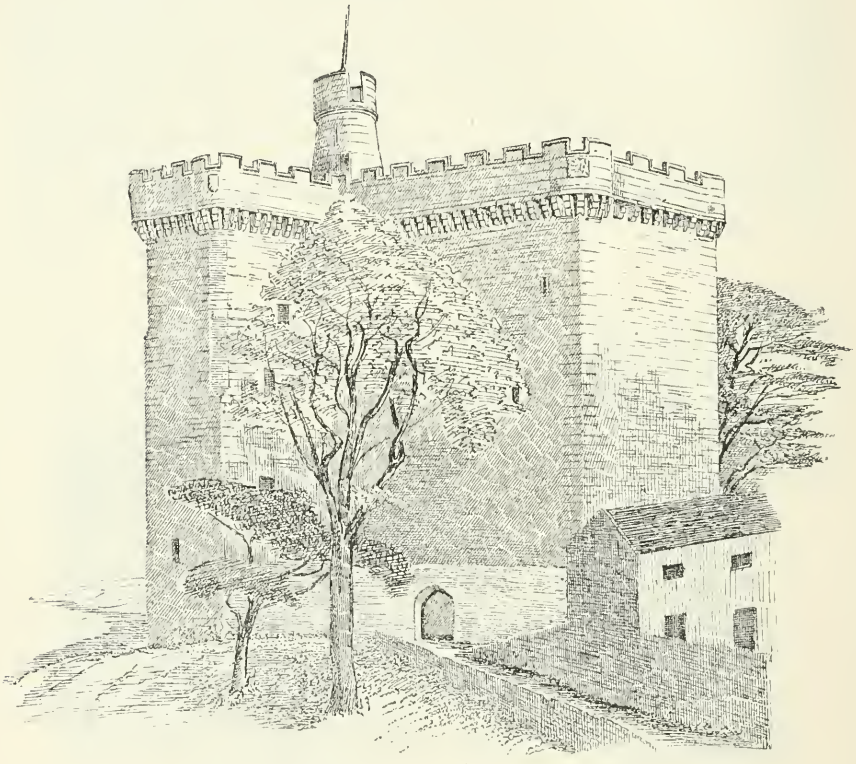


Fig. 284.– Dundas Castle. View from the South-West.

A fine piece of Renaissance work, comprising a fountain and a sun-dial, stands in the pleasure-ground adjoining the castle (Figs. 285, 286). This originally formed the centre of a parterre enclosed with walls of hewn stone, having a banqueting-house at each corner; but nothing of all this, except the fountain, now remains. It is a beautiful work of art, both as regards workmanship and design. The great mass of the surface carving is in low relief, with masks projecting boldly at intervals. The cornice on the top does not seem to be the original one; at all events, it has a crude outline, entirely unlike the spirited details of the other parts of the monument. It will be observed that the central portion of the cornice is projected on elaborately carved trusses on three sides.

while against the fourth side the stair arch abuts. On the trusses, to quote the minute description by W. W. Fyfe, in his work *Summer Life on Land and Water at South Queensferry*, "are heads, male and female; on the third an exquisite alto-relievo of two cherubs, bearing a delicate floral wreath, and underneath the cypher of Sir Walter Dundas in interlaced letters. The corner compartments are also ornamented with sculptures of the Dundas crest, a lion's head wreathed with oak leaves, the Dundas cognisance, a lion gules (on which the remains of the red paint are perceptible), the shield of the knight, quartered with that of his lady, Dame Ann Menteith, whose cypher is also given; and, separately, the salamander of the house of Dundas, noticed as a

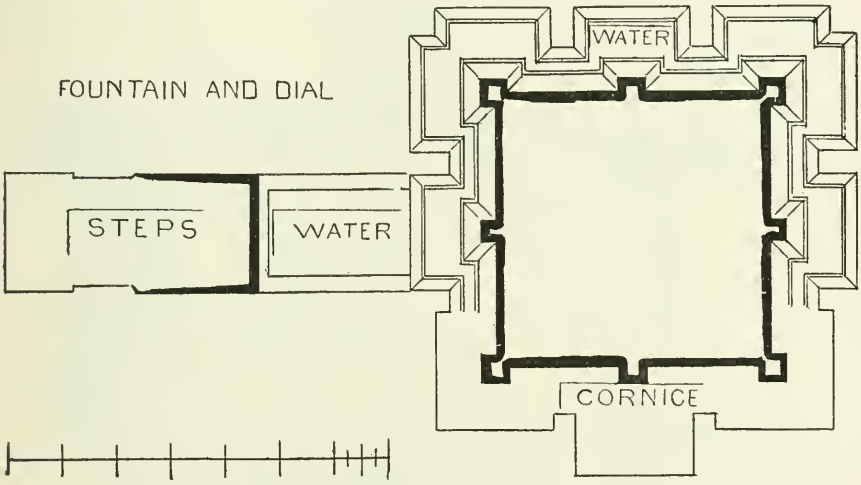


Fig. 285.—Dundas Castle. Plan of Fountain.

peculiarity in George Mackenzie's *Heraldry*, who, speaking of *compartments* in armorial bearings, says that besides the Royal Arms they were only allowed in those of Douglas and Perth, but that some families were permitted *achievements*, of which he adduces as an instance this 'salamander in flames, proper' in the arms of the Laird of Dundas." On each of the four faces are two panels in the frieze, with Latin inscription, thus translated by Mr. Fyfe :—

"See, read, think, and attend.

Through rocks and crags by pipes we lead these streams
That the parched garden may be moistened by the spring water.
Forbear to do harm therefore to the fountain and garden which thou see'st.
Nor yet should'st thou incline to injure the signs of the dial.
View and with grateful eyes enjoy these hours and the garden,
And to the flowers may eager thirst be allayed by the fountain.

In the year of human Salvation 1623."

Beneath, in a line with the capitals, are further inscriptions, thus rendered in the same work :—

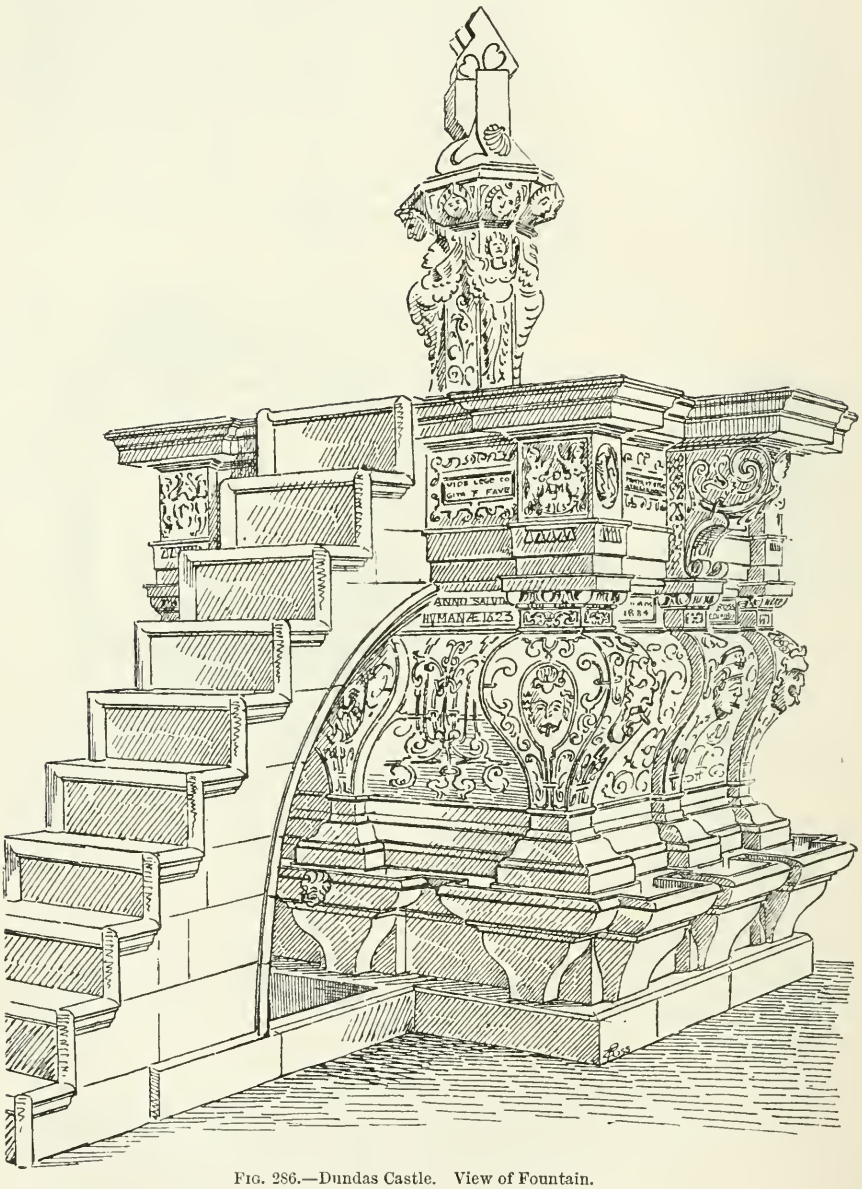


Fig. 286.—Dundas Castle. View of Fountain.

"Sir Walter Dundas, in the year of our Lord 1623 and 61st of his own age, erected and adorned, as an ornament of his county and

family, sacred to the memory of himself, and as a future memorial of his posterity, as also an amusing recreation for friends, guests, and visitors, this fountain in the form of a castle, this dial with its retinue of goddesses, and this garden with its buildings, walls, and quadrangular walks, surrounded with stones piled on high, rocks having been on all sides deeply cut out, which inconveniently covered the ground.

"Whosoever thou art who comest hither, we, so many half-fiendish spectres, are placed here lately by order, expressly for bugbears to the bad, so that the hideous show their visages, lest any meddling, evil-disposed person, should put forth his hand on the dial or garden. We warn robbers to depart, burglars to desist, nothing here is prey for plunderers! For the pleasure and enjoyment of spectators are all these placed here; but we, who rather laugh with joyous front, to a free sight we bid frankly the kind and welcome friends of the host. Boldly use every freedom with the Master, the dial, the garden, and with the garden-beds and couches—him for friendship and conversation, them for the recreation of the mind and thought. With ordinary things to content us here, is to be even with others—we envy not their better things."

The width of the fountain at the base is . .	6 ft. 11 in.
Greatest width at water troughs, . . .	8 ft. 3 in.
Height from ground to top of do., . . .	2 ft. 3 in.
Do. to top of cornice, . .	6 ft. 11½ in.
Height of dial and shaft from top of cornice, .	5 ft. 2 in.
Total height of fountain, ...	12 ft. 1½ in.

The plan of the foundation is taken immediately above the water troughs.

BALVAIRD CASTLE, Fifeshire.

Balvaird Castle, in Fifeshire, stands at the top of Glen Farg, on the boundaries of Perthshire and Fifeshire, and from its lofty site it commands a fine view over the valley of the Eden and the Lomonds of Fife. It is a fifteenth-century keep, and presents a fine and rather advanced specimen as regards its planning and arrangements. It is of the common L plan (Fig. 287), but the entrance and staircase, instead of being inserted in the thickness of the wall, have a special turret provided for them in the re-entering angle. A wider and better staircase is thus obtained than under the old plan of carrying the staircase up in the thickness of the wall.

The ground floor is vaulted, and contains the usual stores, with sleeping loft above. The joists of the sleeping loft, with an ashlar wall supporting them, are still preserved. Descending from a wall chamber

in the north-east corner of this entresol floor is the usual pit for prisoners. The kitchen is on the ground floor in the wing.

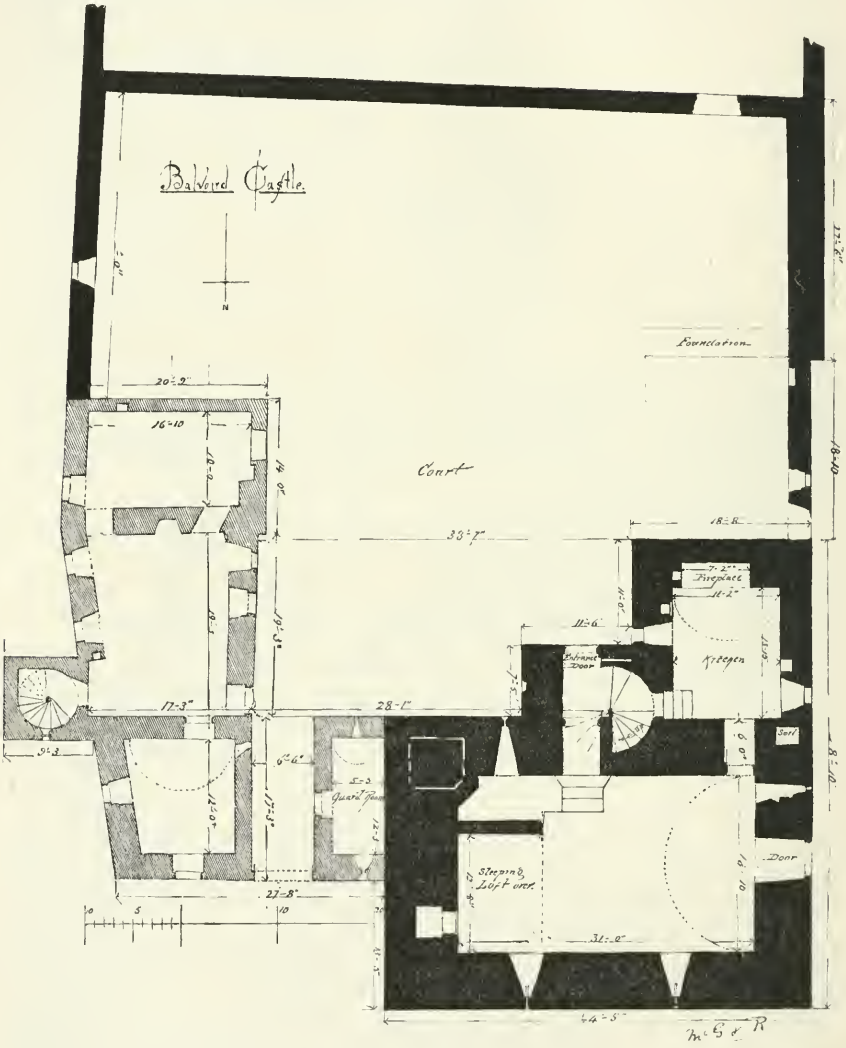


FIG. 287.—Balvaird Castle. Plan of Ground Floor.

The hall is on the first floor (Fig. 288), with private room adjoining, in the wing. The fireplace is well preserved, and is a good specimen of fifteenth-century work (Fig. 289). There are three large windows with seats, and a fine ambry or sideboard (Fig. 289), ornamented with the late Gothic carved work of the period, very similar to that at Borthwick, and with the letters of the sacred monogram Jesu Maria.

There is also a small wall chamber with its original door adjoining the fireplace. The garde-robes are placed so that the flues all descend together in one vent. The soil from the garde-robes fell into a small chamber on the ground floor, and was removed by pulling out a moveable stone at the ground level outside.

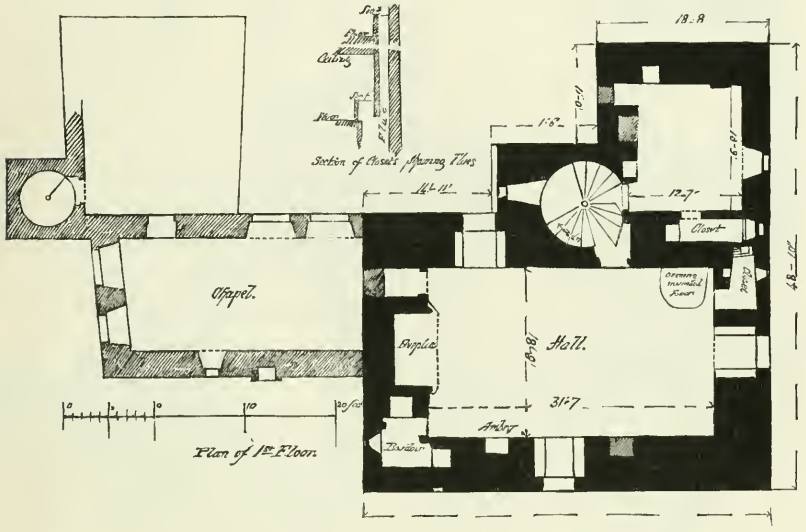


FIG. 288.—Balvaird Castle. Plan of First Floor.

This circumstance of a stone being removeable from the castle wall, and in communication with a flue, derives confirmation from the lines in the ballad of "Edom o' Gordon," where the besieged matron cries from the battlements to her traitorous servant, who seems to have shown the besiegers how the keep might be set on fire :—

"Wae worth, wae worth ye, Jock, ma man,
I paid ye weel your fee,
Why pu' ye out the grund-wa-stane,
Lets in the reek to me?

Wae worth, wae worth ye, Jock, ma man,
I paid ye weel your hire,
Why pu' ye out the grund-wa-stane,
To me lets in the fire?"

and it explains the meaning of the twice-recurring line in the ballad, "Why pu' ye out the grund-wa'-stane?" as referring to a known moveable stone with a specific name, the pulling out of which would give access to the smoke from burning branches piled against the castle wall.

There is an unusual arrangement of stone spouts from the roof,

whereby these garde-robes could be washed out with rain-water (sketch, Fig. 288).

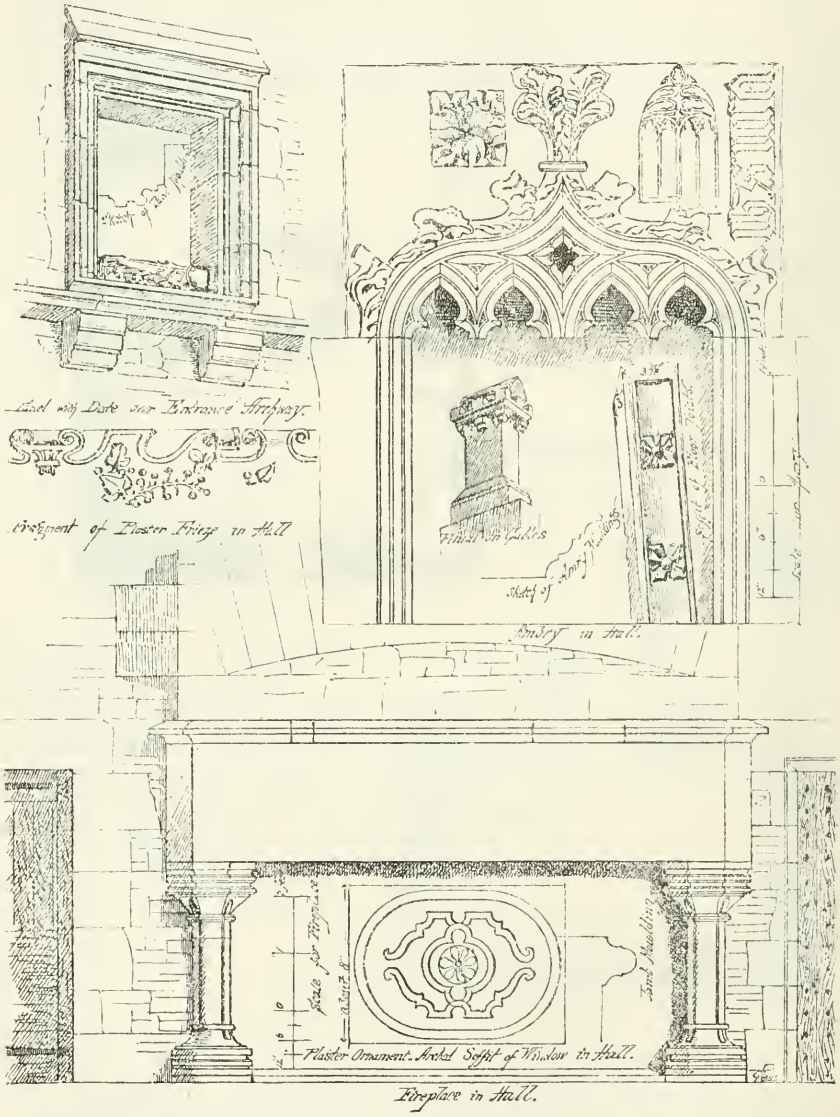

Lintel with Date over Entrance Archway
Fragment of Plaster Frieze in Hall
Ambry in Hall
Plaster Ornament. Arched Soffit of Window in Hall.
Fireplace in Hall.

Fig. 289.—Balvaird Castle. Fireplace, Ambry, etc.

This points to an improvement in civilisation, and, looking to the elegance of the work, both external and internal, we must recognise in this castle a great advancement in architecture. Here, as at Sauchie, we

observe the change from the original and simply useful forms of the

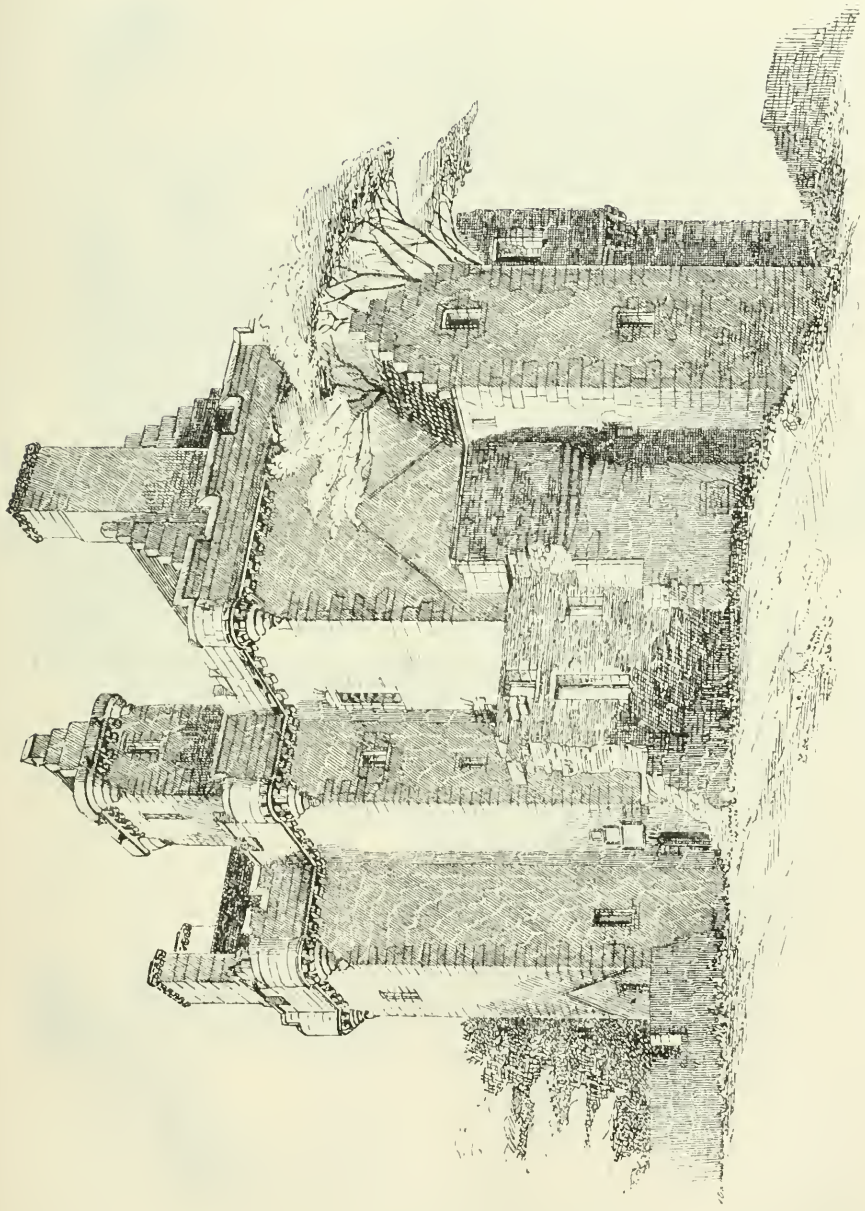


Fig. 290.—Balvaird Castle. View from the South-East.

machicolations and corbels to a more ornamental design (Figs. 290, 291,

292). This shows the commencement of the change in the character-

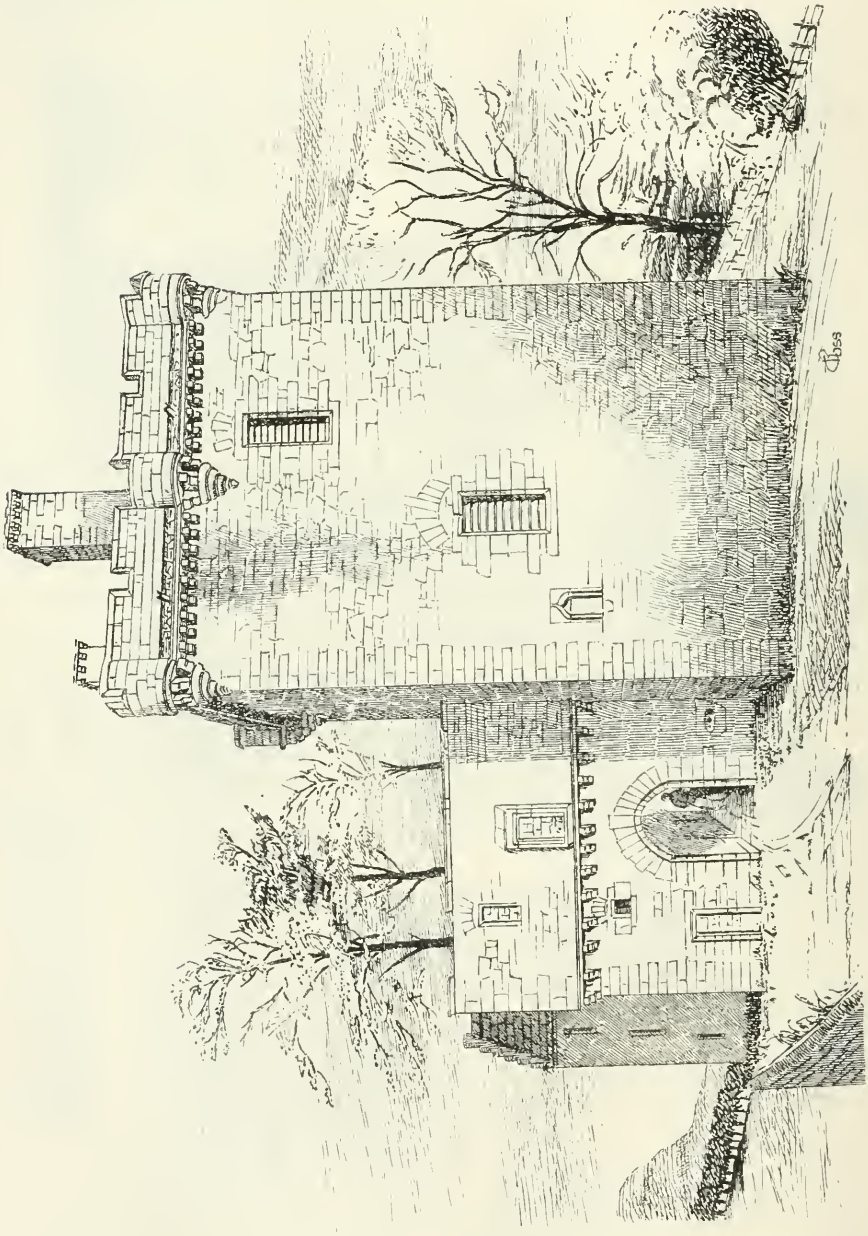


Fig. 291.—Balvaird Castle View of North Front.

istics which distinguish this earlier period from the later amongst our

Scotch towers. The watch-turret over the staircase (Fig. 290), and the

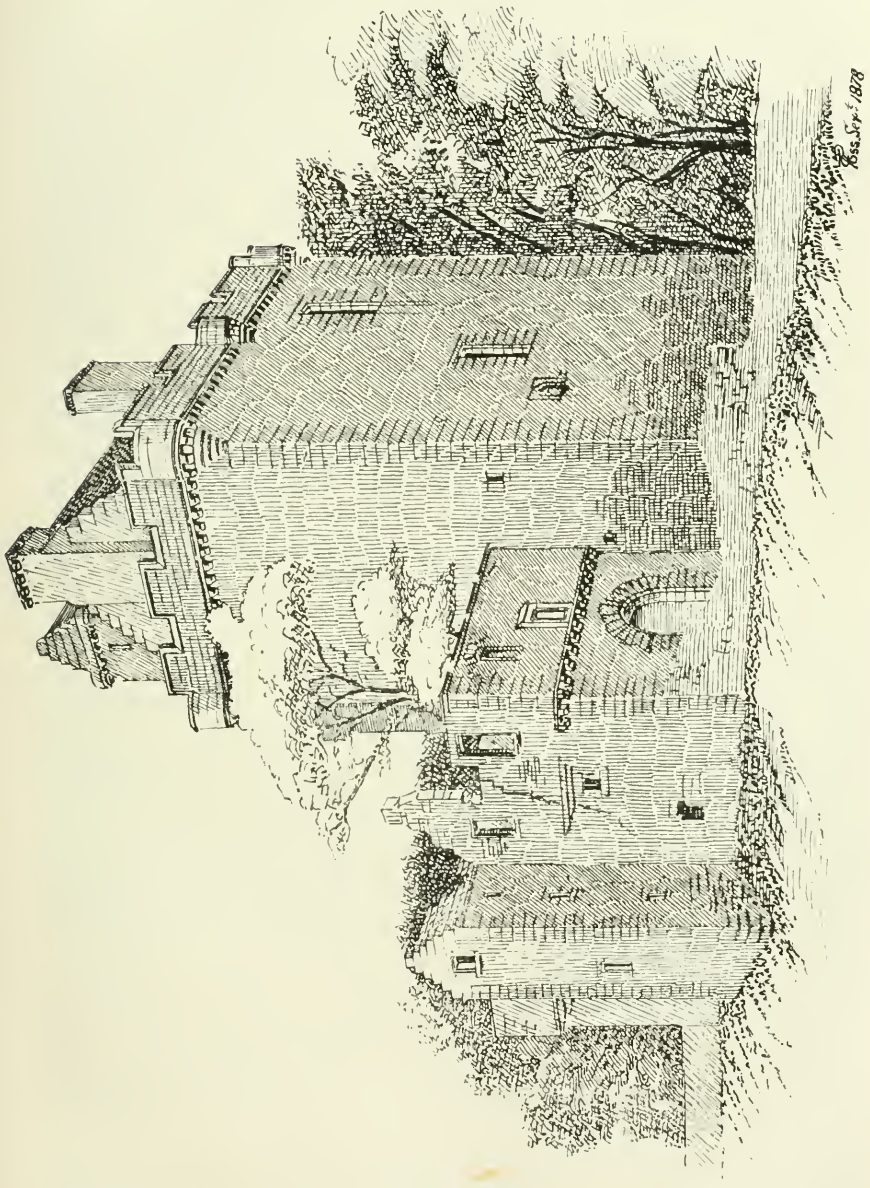


FIG. 292.—Balvaird Castle. View from the North-East.

ornamental chimney copes, are also distinctive features. These and the parapets are here in much better preservation than usual, and render

this castle peculiarly interesting. Fig. 293 shows the complete arrangements of the parapets and parapet walks for defence, and a small sketch in Fig. 289 shows the ornamental finials with which the gables were terminated.

There is a story above the hall with a timber floor, the beams of which still remain, supported on stone corbels, and hanging from the beams are the remains of the bracketing of the pendent plaster ceiling, while portions of the ornamental plaster-work still remain on the walls, or strew the floor. Of some scattered parts of these sketches are given (Fig. 289), showing by their style that they belong to the date of the later additions to the castle.

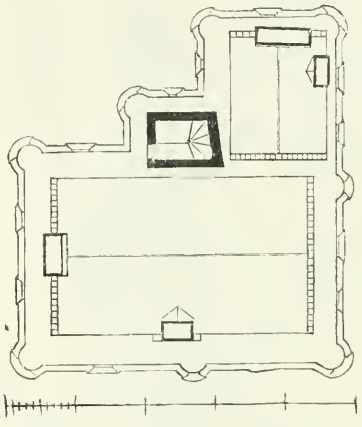


Fig. 293.—Balvaird Castle. Plan of Roof.

In the wing there are four stories above the kitchen; only the joists of the second story now remain, their under sides being beautifully carved with rosettes in a hollow (Fig. 289).

In 1567 considerable additions were made to this castle. Another court was formed containing stables and other offices, some of which still remain. Opposite the gate of the outer court is the arched gateway to the inner court or quadrangle, with the date of the work (1567) carved in a panel above the arch (sketch, Fig. 289). There is a vaulted guard-room on one side, and a series of apartments on the other. Over the entrance passage is a large room, with access from the keep, said to have been the chapel. There were also buildings on the west side of the quadrangle, but these sixteenth-century erections are all greatly ruined, and their use can scarcely be recognised. These additions would no doubt convert this keep into a castle surrounding a courtyard; but as the keep is so well preserved, and is such a good specimen of its kind, we have thought it better to disregard the subsequent additions, and class it along with the keeps with wings.

An enclosure to the south has evidently been a pleasure garden, and there is a large walled garden or orchard adjoining the castle on the east, all pointing to the more peaceful and settled condition of the country, and the amelioration of manners in the early days of Queen Mary's reign.

Over the plain, full-centred arch of the entrance doorway to the keep are the remains of several armorial bearings (Fig. 294). The arms are supposed to be those of Margaret Barclay and her husband, Sir Andrew Murray, and if this be the case, the building must be as old as

the reign of James IV., 1487 till 1513. A recumbent statue lying in the castle was brought from the old church of Arngask when the latter was demolished, and it is supposed to have been the monument of Lady Margaret Barclay, who married Sir Andrew Murray, youngest son of Sir William Murray of Tulliebardine, and who, as the surviving child of James Barclay of Kippo, to whom the barony of Balvaird and Arngask previously belonged, brought with her in marriage these baronies.

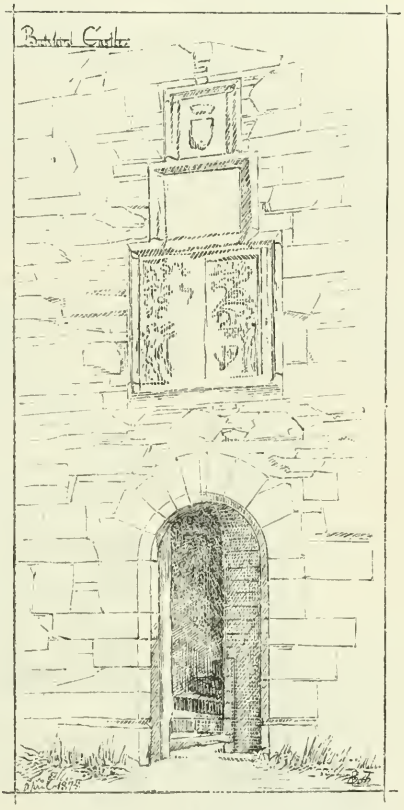


FIG. 294.—Balvaird Castle. Entrance to Keep.

Baron Balvaird is a title in the peerage of Scotland, conferred, 17th November 1641, on the Reverend Andrew Murray, minister of Abdie from 1618, a second son of David Murray of Balgonie, and Agnes his wife, a daughter of Moncreiff of Moncreiff. In 1631, on the death of Sir David Murray of Gospertie, first Viscount of Stormont, the minister of Abdie succeeded to the baronies of Arngask and Kippo. He was knighted at the coronation of Charles I. in Scotland, 1633, and three years afterwards he had a charter of the lands of Pitlochie. In 1638 he was a member of the General Assembly held at Glasgow, of which Henderson was Moderator, and for the part he took in affairs he was favourably represented to the King by the Commissioner, the Marquis of Hamilton, and in the same year he was deprived of Abdie by the Church for his moderate views.

Charles afterwards raised him to the peerage, with the title of Lord Balvaird, doubtless to the great contempt and hatred of his clerical brethren, as he was prohibited by the Assembly from bearing improper titles.

On the death of Viscount Stormont in 1642 Lord Balvaird succeeded to the lands, lordship, and barony of Stormont, while the title of Viscount Stormont went to the second Earl of Annandale. Lord Balvaird died on 24th September 1644. By his wife, Lady Elizabeth Carnegy, fifth daughter of the Earl of Southesk, he had five sons and three daughters. His eldest son, second Lord Balvaird, succeeded to the titles of Viscount

Stormont and Lord Scone, and the title of Lord Balvaird became thereafter merged in that of Viscount Stormont.

BORTHWICK CASTLE, Midlothian.

By far the finest of our castles built on the model of the keep is Borthwick in Midlothian, about two and a half miles south-east of Gorebridge. This keep, together with its courtyard and outworks, are fortunately all in good preservation, and have been little added to or altered (Fig. 295). The date of Borthwick Castle is known, as the licence to build it was granted by James I., in 1430, to Sir William Borthwick, afterwards Lord Borthwick. The site of this castle, like that of so many others, is a tongue of land jutting out into the middle of a valley, at the junction of two streams, towards which the ground slopes precipitously.

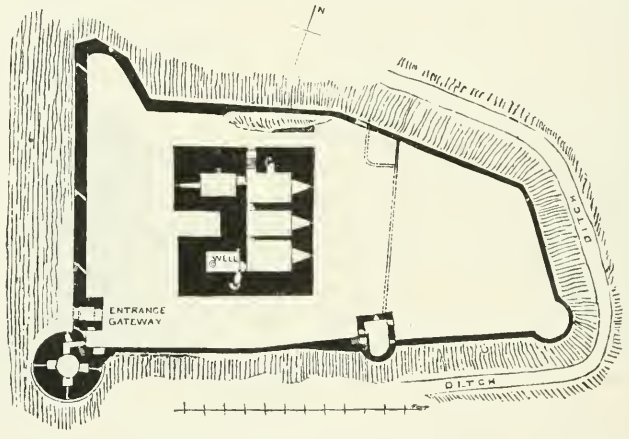


Fig. 295.—Borthwick Castle. General Plan.

The general plan of the main block of the keep is, as usual, a parallelogram, containing the great hall; but in this case, instead of one projecting wing to give additional accommodation, as in several instances above referred to, there are *two* such projecting wings.

The outer walls enclose a courtyard of irregular form, about 240 feet in length by 120 feet in average breadth. These walls stand at the top of steep banks, at the bottom of which there is a ditch. The angles and curtains are defended with towers and bastions, that flanking the gateway being circular, and of great strength; it is 35 feet in diameter, and the walls are 12 feet thick, leaving a chamber in the centre only 11 feet wide.

The gatehouse has had a drawbridge and outer gate, as well as a portcullis in the inner archway.

There is also a tower, or outhouse, at the south side of the courtyard, built so as to strengthen that flank, which was probably occupied by part of the garrison, or by the followers of visitors.

These towers, and some of the walls, contain large horizontal port-holes for guns, which may in some instances have been insertions, but it is more likely that the portions containing these embrasures are of later date. One of the port-holes in the basement of the gate-tower is remarkable; it commands the slope of the hill approaching the castle, and the port-hole, instead of being built horizontally in the wall, as usual, is set at the same angle as the side of the hill, so as to sweep the whole hillside (Fig. 296).

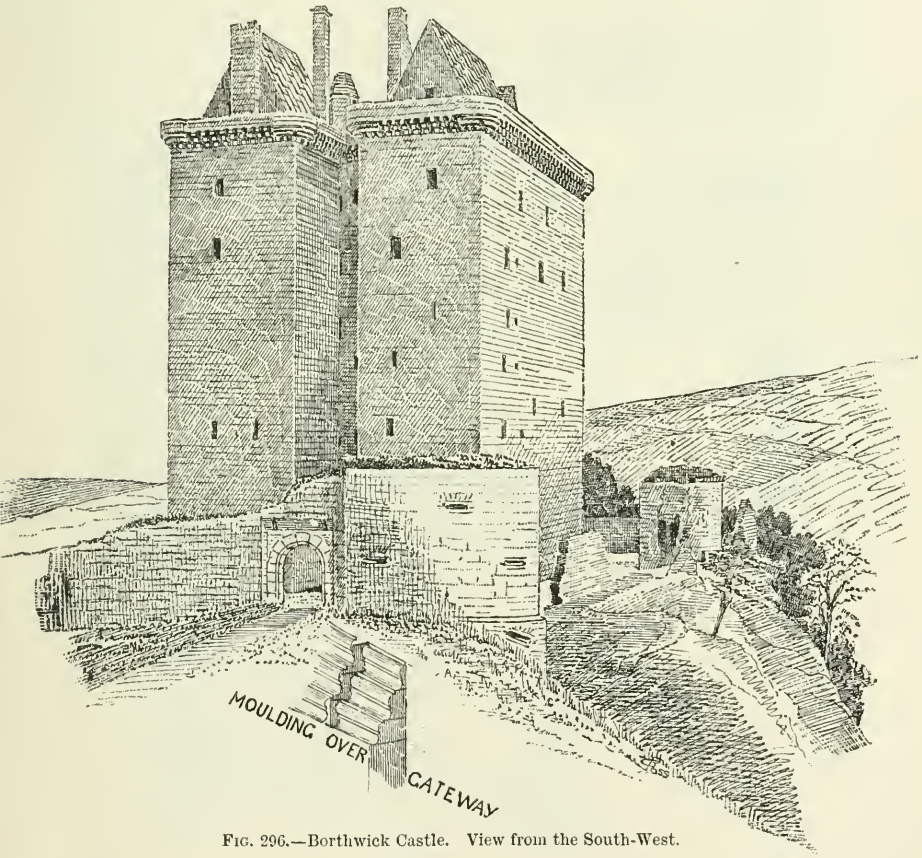


Fig. 296.—Borthwick Castle. View from the South-West.

The north end of the courtyard has been cut off from the main court by a wall, and probably contained the stables and other outbuildings.

To reach the entrance door of the keep from the gateway the visitor had to pass round two sides of the keep and then to ascend a staircase

leading to the parapet of the outer wall, from which the keep was

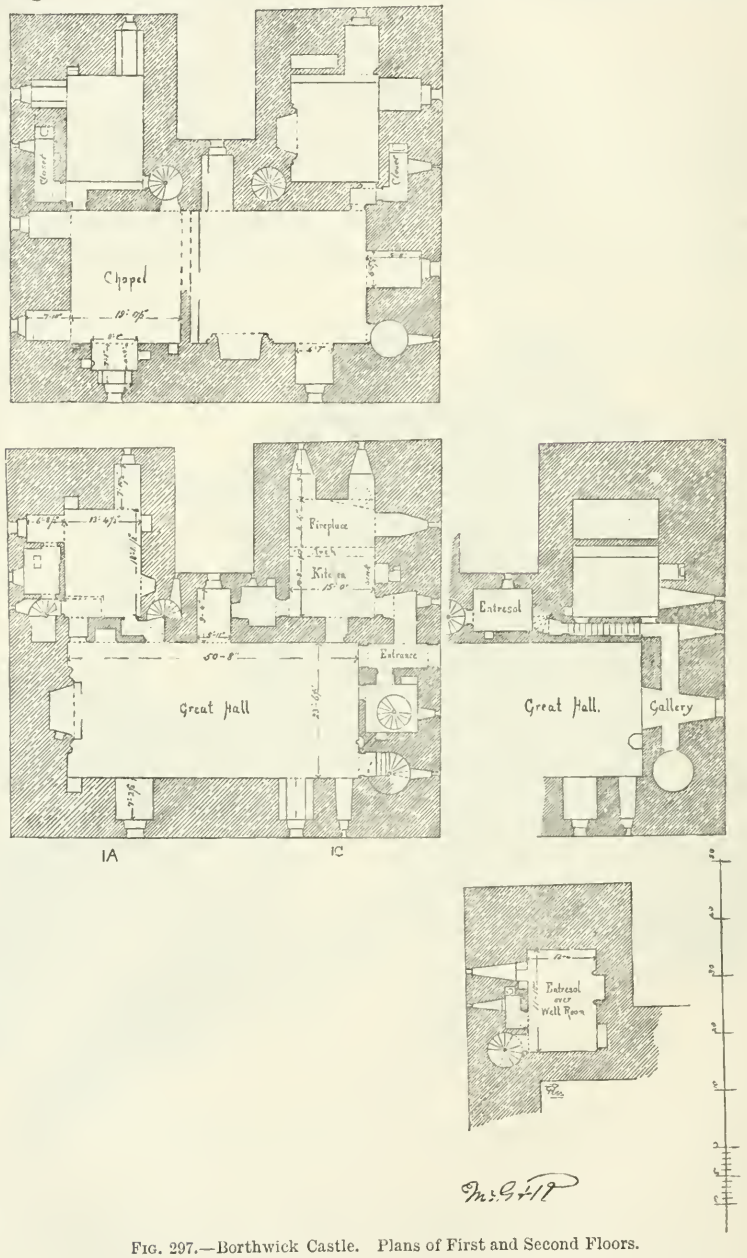


Fig. 297.—Borthwick Castle. Plans of First and Second Floors.

entered by a bridge on the level of the first floor. The bridge is now

destroyed, but the stones wrought for the springing of the arch still remain in the castle wall.

Beneath this is the doorway to the basement floor, which is a few steps down from the court (see section D E, Fig. 300).

The main portion of the basement is divided into three store-rooms, each with a single loop for light, and that next the entrance has a stair to the first floor. In the south wing there is a draw-well (section, Fig. 299) and a separate stair to the first floor. In the north wing was the dungeon (section C B, Fig. 300), apparently divided into two floors, with a garde-robe entering off the upper floor, and a small ventilation opening set high in the wall.

The apartments on the basement floor are all vaulted, and there was a loft in the vault over each. In the case of the well room, the vault is low, and there is an entresol room above (Fig. 299). The walls are 12 to 14 feet thick, and the only openings in the basement are small loops for light and ventilation.

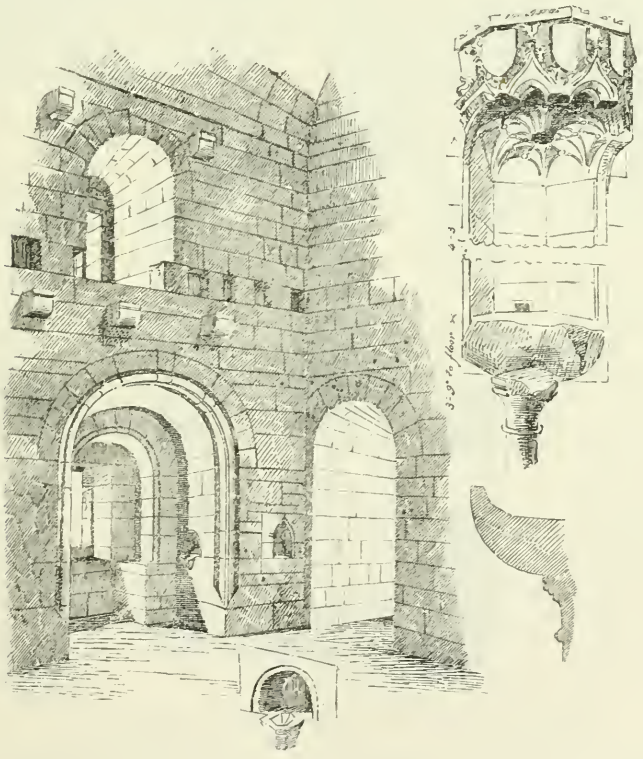


Fig. 298.—Borthwick Castle. View of Chapel and of Basin in Screens.

On the first floor (Fig. 297) the whole of the main building is occupied with the great hall, 50 feet 8 inches by 23 feet 6 inches. The main

entrance from the bridge is protected by the guard-room in the thickness of the wall. The stair from the basement also landed in this guard-room, so that all communication, in or out, up or down, was well watched. The kitchen occupies the north wing, and the private parlour the south wing, on this floor.

The kitchen has an immense fireplace, with three windows opening into it, and the usual stone sink and drain. There is a small pantry between the kitchen and the hall, and at the north end of the hall there has evidently been a passage cut off by a screen, as there is a window provided in the east wall for lighting it. There is also a service window from the kitchen into this passage, which in England would be called the "screens." This is amongst the earliest examples of this arrangement, which afterwards became a common feature. From the "screens" the common stair in the north-east angle conducts to the upper flats and the roof. Over the "screens" was no doubt situated the minstrels' gallery.

In the screens is a very handsome wash-hand basin (Fig. 298), with carved and ornamental canopy, and drain to the outside. An ornamental basin of this kind in the screens is a common feature in English halls, but is not so common in Scotland.

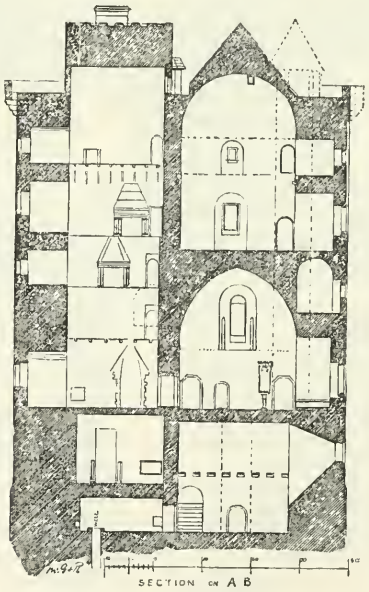


Fig. 299.—Borthwick Castle. Transverse Section through Hall.

The hall is 29 feet high to the apex of its pointed barrel vault (Figs. 299, 300), which has evidently been all open to the hall without any loft in the vault.

The windows are rather few and small. At the south end there is a large and sculptured fireplace 9 feet wide (Fig. 301), with caps and cornice, enriched with mouldings and ornaments of the period (Fig. 302), and a lofty pointed hood ; there is also a sideboard, or seat, with enriched canopy

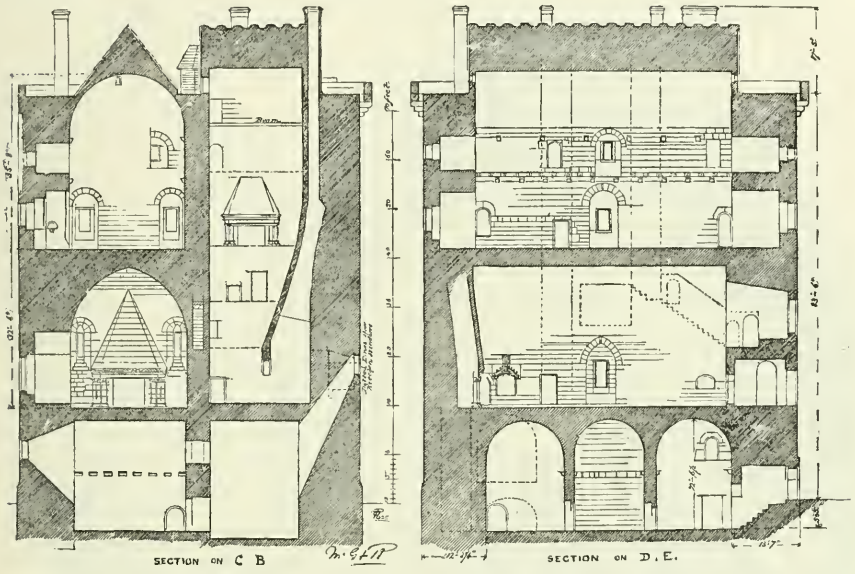


Fig. 300.—Borthwick Castle. Transverse and Longitudinal Sections.

of fifteenth-century work. A triangular-headed door leads from the hall to the private parlour in the south wing, and the door has had a wooden porch to shut off the stair-landing (see Plan of First Floor, Fig. 297).

There is a privy closet adjoining this parlour, the arrangements of which show more attention to sanitary requirements than these old builders often receive credit for.

The well being immediately below this room, it has been found advisable not to carry down the flues from the garde-robes in the thickness of the wall, or to discharge them to the exterior in the usual manner, but to remove the materials in a special way so as to avoid contamination ; instead of a flue from this privy closet, therefore, a moveable receptacle was used. In the same way provision is made for removing similar receptacles from the garde-robes in the floors above this, by an aperture in the ceiling, through which they could be lowered and carried away (see Plan).

The stair leading from the screens was no doubt the common stair used by the domestics and soldiers ; it also gave access to the musicians' gallery over the screens, and to a passage in the wall leading to another

stair, communicating with the tier of rooms over the kitchen in the north wing (except one, to be afterwards mentioned), and to the roof. Another stair in the angle of the south wing and hall led to the upper floors over the south wing, and also to the roof.

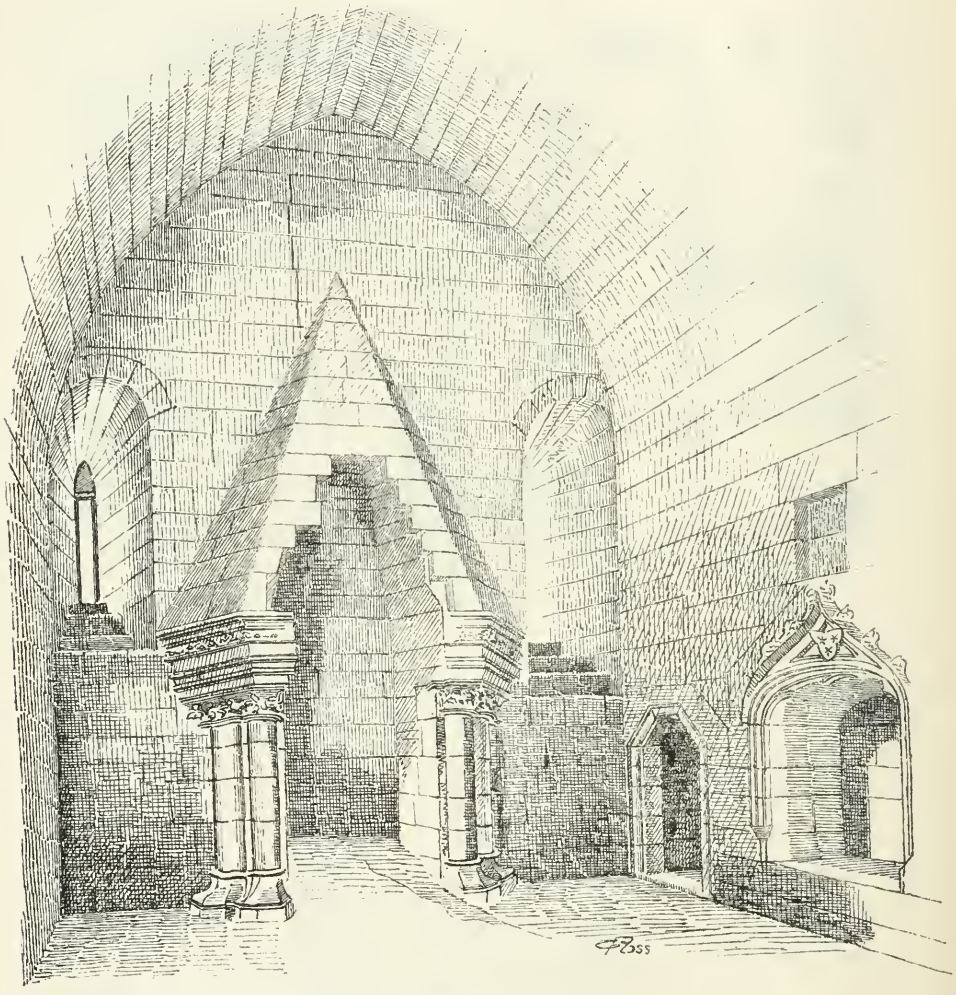


Fig. 301.—Borthwick Castle. Interior of Hall.

There are three stories over the hall, the upper story only being vaulted in order to carry the stone roof, the other floors being of wood. The floor over the hall was occupied with the drawing-room and the chapel. The former is well lighted and has a good fireplace, and communicates directly with a handsome room in the north wing (section C B,

Fig. 300), with a hooded fireplace, which was evidently meant for a principal or guest's bedroom or boudoir. This is the room which, as we noticed, the stair in the north wing passes but does not communicate with. The section C B also shows the remarkable manner in which the wall of this room, and the two rooms below it, are affected by the slope of the inner wall of the kitchen chimney. The chapel was

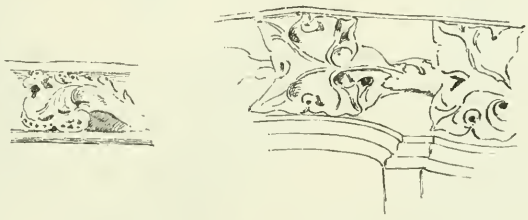


Fig. 302.—Borthwick Castle. Enrichments of Fireplace.

probably also used as a sitting-room, the oratory (Fig. 298) being confined to the recess of the east window, in which are situated the piscina and locker. The two upper floors were no doubt bedrooms, that in the loft of the vault being probably used by the garrison who manned the roof. The defences of the keep are, as usual, at the roof (Fig. 303). The parapet is carried on bold corbels with open machicolations on all sides except the east where the parapet is continued straight up from the face of the wall. This is a subject which has given rise to some ingenious theories, but although at first sight somewhat puzzling, its explanation is very simple and natural.

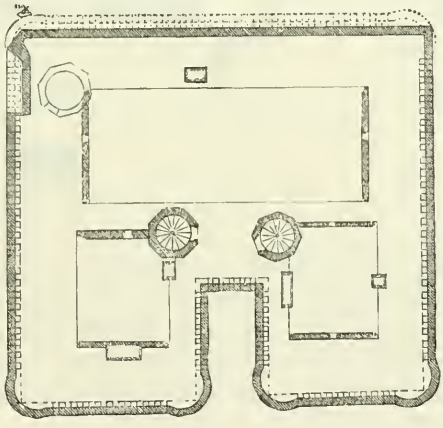


Fig. 303.—Borthwick Castle. Plan of Roof and Battlements.

This side of the keep has been battered by artillery, generally supposed to have been by Cromwell in 1650, and it still bears distinct marks of such action. The east parapet, with its corbels and angle bartizans, were then destroyed, and, in restoring the parapet, it has been carried up flush with the face of the wall. This is quite evident on a careful examination on the spot. Parts of the circular bartizans at the angles and some of the corbels, and the holes where the others have been inserted all round, are still to be seen.

The stone gutters on the top of the walls are wide, and afford ample space for the operations of a numerous garrison. Some traces are still visible of the painting with which the vault of the great hall was decorated, but they are fast disappearing.

AVONDALE CASTLE, Lanarkshire.

This building, now reduced to one round tower and fragments of the walls, occupies a lofty isolated mound, with steep rocky slopes on all sides, and nearly surrounded by the Powmillan Burn, a tributary of the Avon.

The castle overlooks the town of Strathavon in Lanarkshire, about seven miles south of Hamilton. The town is evidently a place of some antiquity, and its ancient houses, its steep and narrow streets joined with bridges over the burn, the whole surmounted with the ruins of the castle, all combine to form a prospect more than usually picturesque.

Avondale Castle seems to have been built by Andrew Stewart, an illegitimate grandson of the second Duke of Albany, who obtained the barony in 1456, and became Lord Avondale in 1457.

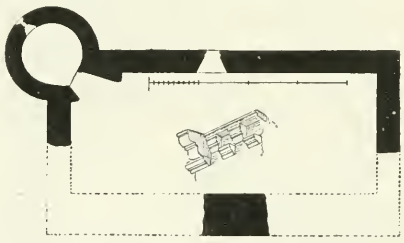


Fig. 304.—Avondale Castle. Plan.

The building has apparently been designed on the plan (Fig. 304) of a parallelogram, with two towers at diagonally opposite corners. One of these towers still remains at the north-west angle overlooking the town (Fig. 305). It is circular on plan, and contains large port-holes for guns, with the broad external splay usual in the end of the fifteenth century.

A fragment of the cornice, which can still be traced on the small surviving portion of the south wall of the main building (sketch, Fig. 304), is also characteristic of the fifteenth century.

A considerable part of the north wall exists, but it has been greatly altered, and now contains few original features. The castle was occupied till 1717 by the Duchess of Hamilton, whose memory is still lovingly cherished by the people of Strathavon. After her Grace's death the

valuable old furniture was dispersed, and the castle allowed to fall into

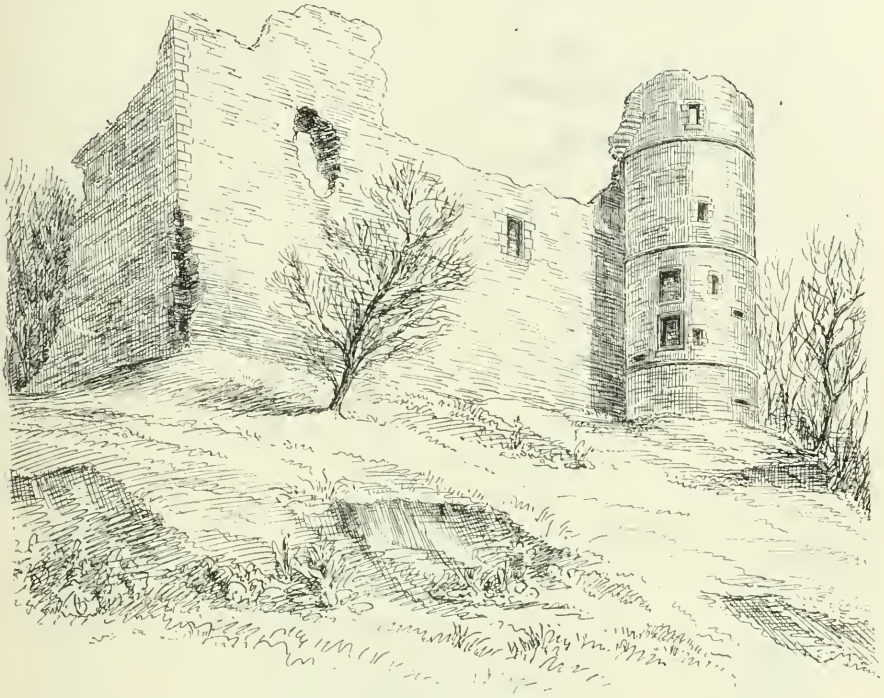


Fig. 305.—Avondale Castle. View from the North-East.

ruin, a process which has evidently been greatly hastened by the hand of man.

STRUTHERS CASTLE, Fifeshire.

Struthers Castle is situated about three miles south from Cupar in Fife, and midway between Scotstarvet Tower and the ruins of Craighall. Although formerly a place of great size and strength, and inhabited by its noble owners till last century, it is now a mere fragmentary wreck. Neither the strength of its walls nor the associations thrown over it by the genius of Sir David Lindsay, have availed to save Struthers from becoming a prey to the most ruthless spoliation, so that little more than a bare outline of its plan is all that can now be traced. The main portion has been of the L form (Fig. 306), with a wing projecting eastwards from the centre of the eastern limb. The gable of this wing, with the beginning of the return walls, is entire.

This gable is flanked by two huge buttresses (Fig 307), measuring about 9 feet broad, tapering upwards, and rounded at the top by corbelling, so as to support a turret. These are remarkable features, and

they are of admirable design and workmanship. With the exception of those on the north side of Bothwell Castle, shown in Figs. 77 and 78, we

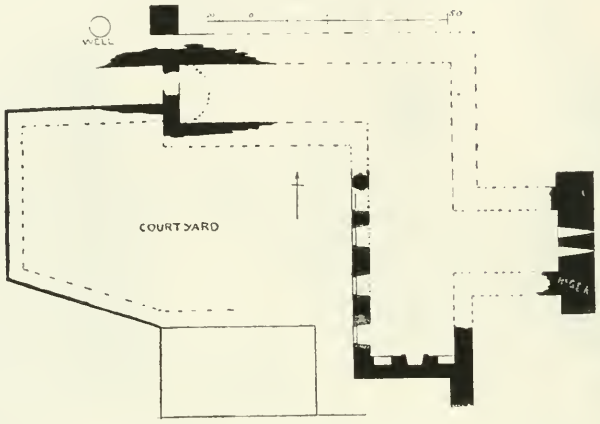


Fig. 306.—Struthers Castle. Plan.

cannot recall anything like them in any other Scotch building. They resemble in their method of tapering the buttresses at the east end of the Grey Friars' Church at Stirling, and other late fifteenth or sixteenth century churches in Scotland.

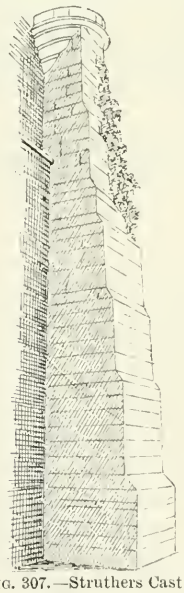


Fig. 307.—Struthers Castle. Buttress of East Gable.

Struthers is in all likelihood of that age. The south gable of the southern limb of the L is also entire (Fig. 308), with part of the east return wall and the base of a single buttress, which stands at right angles to the gable, whereas the two above described are built in continuation of the east gable. A considerable portion of the west wall remains, with four large lofty round-headed windows (Fig. 308). These are insertions corresponding in style to the seventeenth-century work at Craighall House, above mentioned as in the vicinity. At the west end of the other limb are the remains of a circular vault, and standing clear and detached is another buttress, about 7 feet 4 inches square, and about 20 feet high. Adjoining this is the well. The foundations of walls extending westwards and southwards from this can still be made out, evidently enclosing a courtyard (as shown on Plan), with an oblong building to the south, indicated in outline.

The total length of the buildings from east to west, over the walls, is about 146 feet, by 87 feet from north to south, each range of buildings

having a width of about 28 feet, and varying from four to five stories in height.

Struthers was the Fifeshire residence of the Lords Lindsay of the Byres, a branch of the Lindsays who ultimately succeeded to the Crawford peerage. But probably the place is now best known in connection with Sir David Lindsay of the Mount, who, as a scion of a younger branch of the Byres family, was a frequent visitor at Struthers, where he enjoyed the congenial company of "Squyre Meldrum," who in his later years acted as steward or mareschal to Lord Lindsay, and whose stirring adventures by sea and land are the theme of Sir David's most amusing poem, "The Historie of Squyer Meldrum."

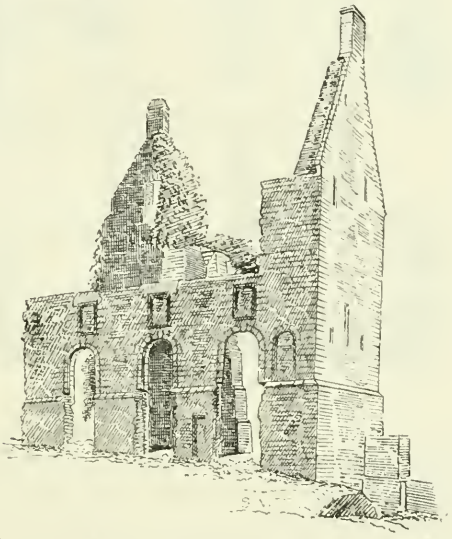


Fig. 308.—Struthers Castle. View from the South-West.

In the beginning of the year 1651 Charles II. spent two days at Struthers, and two years afterwards the place was occupied by the soldiers of Cromwell.

According to Sir Robert Sibbald, "Struthers, or Ochterother Struther," is so called from the morasses round it, and Sir Robert mentions it as "a large old house, with gardens, great orchards, and vast enclosures and planting."

STONEYPATH TOWER, Haddingtonshire.

This interesting specimen of an L tower exists in a wofully dilapidated state about two miles up the Papana Water from Whittingham Tower, and near to what was the Nunnery of Nunraw, now converted into a modern mansion-house. The situation of Stoneypath, in a little-frequented glen, is very fine; it stands on the edge of a high and steep

bank rising up from the wooded dell through which flows the Papana Burn, and as seen from the bed of the stream the tower forms a striking object. The main block measures over the walls 44 feet by 31 feet, the projection being 27 feet by 19 feet. It contains a central vault (section, Fig. 309), which supports the floor of the hall, 19 feet high. The space under this vault is as usual divided with an intermediate floor. The

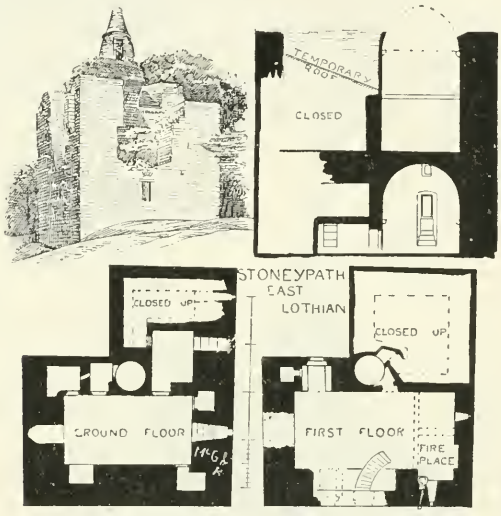


Fig. 309.—Stoneypath Tower. Plans, Section, and View.

tower was also vaulted at the roof, and between this vault and the hall floor it contained two full floors, and one floor in the vault. The entrance was at the south side, at the level of the upper floor, under the central vault, and about six or eight feet above the ground. From this floor access was gained to the circular staircase at the north side, which led down to the basement floor and up to the top. The total height to the top of the staircase is about 60 feet above the ground floor. The position of this staircase on the plan is peculiar. Frequently the staircase is a square structure projected in the re-entering angle, of which arrangement several examples have been given. But at Stoneypath the stair turret is as it were folded over, and placed inside the re-entering angle. In the small apartment at the north-west corner of the basement floor, in the thickness of the wall, was, we understand, the well, now heaped full of ruins; but we are informed that it existed in the memory of persons now living. The room in the wing at the north-east corner is low and vaulted, and lighted by a narrow window, which goes up in the thickness of the wall to a considerable height above the ceiling, so that it resembles a chimney flue. This was probably used as a dungeon. The hall floor is very ruinous, but for such a small tower the hall has

been well finished, having been lighted with lofty arched windows, provided with stone seats, and one of them having an ambry above the seat with an O.G. arched lintel. The ruinous fireplace at the east end is very remarkable. It has measured about 9 feet 6 inches by 7 feet 6 inches, having a flat arched opening to the hall. This fireplace seems to have been contrived "a double debt to pay," being at once the hall fireplace and the kitchen. It has the usual stone sink and drain to the outside, and is lighted by a small high window. The small apartment about 7 feet 6 inches square adjoining probably entered off the fireplace, and may have been used as a part of the kitchen. The turret roof, built with stone, on the top of the staircase still exists, but it is in a very threatening condition, and unless some repairs are made on it, it will soon fall to the ground. It is a picturesque structure of a lofty bee-hive shape, unlike that of any other tower known to us. There is a projecting garde-robe from the upper floor at the west end, and remains of a circular corbelled turret at the north-east corner.

The name of John Lyle of Stoneypath occurs as early as 1446 in a charter by James II. to Robert de Lyle of Duchal, and on a shield near the south-west corner of the tower what seems to be the Lyle arms are scratched rather than carved. The arms are fretty of six pieces. At a later time the tower belonged to the Douglas family. The building probably belongs to the early part of the sixteenth century, but there are no features to enable its age to be accurately determined.

FEDERATE CASTLE, Aberdeenshire.

Federate Castle is situated within two miles of New Deer. It now stands amidst corn-fields, but in the days of its strength it was surrounded with a morass and a fosse. The castle was reached by a causeway and drawbridge, traces of which were visible when the first Statistical Account was written. What remains is a building of the L plan (Fig. 310), with rounded corners, measuring 58 feet 8 inches by 44 feet, with walls 7 feet and 8 feet thick. The castle has the appearance of having been crashed right through diagonally, as if by heavy artillery (Fig. 311); and it is said to have been besieged by King William's troops when held by some of the partisans of James II., who fled thither after the battle of Killiecrankie. But it also appears, from a note in Dr. Pratt's *Guide to Buchan*, inserted after his account of Federate was written, that a great part of the ruin was caused by an attempt to blow up the castle with gunpowder, the result being that the area floor and part of the first floor lie buried in ruins.

The ground floor and first floor were vaulted, and there seem altogether to have been four floors, although Dr. Pratt mentions that it was six or seven stories high. Above the hall there is a set-off all round, as

seen in the view (Fig. 311). The entrance is not in the usual place, viz., the re-entering angle, but in the west wall, almost below the wide window

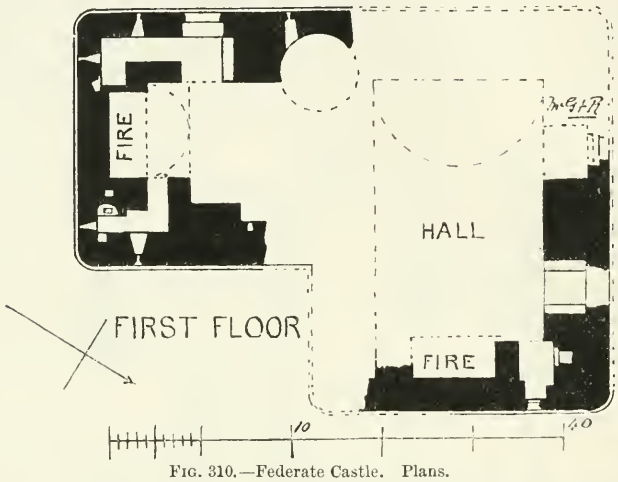


FIG. 310.—Federate Castle. Plans.

shown on the plan. It led directly into the kitchen, and a circular stair on the left hand gave access to the upper rooms.

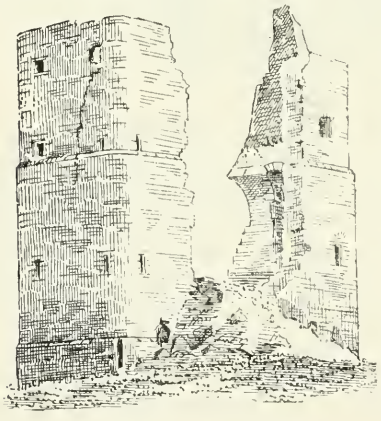


FIG. 311.—Federate Castle.

The first floor, which is the one shown on the plan, contained two apartments—the hall, 29 feet by 18 feet 6 inches, by 17 feet or 18 feet high, being one, and the private room in the wing the other. On the first and second floors, in the thickness of the walls, are numerous wall closets and garde-robes.

There seems to be no definite information as to the date of the erection of this castle.

The property of Federate was possessed by the Crawfords in the end of the thirteenth and the beginning of the fourteenth centuries, and, judging from its style, it was probably erected about the end of the fifteenth century.

The keep towers of the Third Period which we have above described are detached buildings standing alone or surrounded with their enclosing walls. We shall now proceed to the consideration of castles of which similar keeps have formed the nucleus, but which have been enlarged and extended so as to become castles with buildings surrounding a courtyard.

THIRD PERIOD—KEEPS ENLARGED IN VARIOUS WAYS BY ADDITIONS.

The keeps of this period, like those of the previous century, were frequently added to and enlarged. This was generally done by erecting buildings round the courtyard, so as to convert the keep into a castle surrounding a quadrangle, as at Edzell, Balgonie, etc. Sometimes detached buildings were added, and only connected with the keep by means of a drawbridge or otherwise, as in the case of Ruthven Castle and Dean Castle. The keeps were also sometimes so enlarged by additions made to the keep itself as to convert it into an enlarged mansion, as at Fallside. We shall now give some examples of the various methods adopted for utilising the keep in connection with buildings of a later period.

First, Keeps enlarged into Castles surrounding a Courtyard.

EDZELL CASTLE, Forfarshire.

This castle, the seat of the Lindsays, Earls of Crawford, was the most extensive baronial residence in Forfarshire. It is situated near the West Water, at the point where the plain of Forfarshire terminates, and the hills begin to rise. The castle is of considerable extent, and comprises an original fifteenth-century keep, which was enlarged in the sixteenth century into a castle built round a quadrangle, and at the same date a large pleasure garden was enclosed with a remarkable and highly ornamental wall, with a garden-house and bath-house attached. The oldest part of the edifice is the keep (Fig. 312), situated at the south-west angle of the principal courtyard, and called the "Stirling Tower," from the family through whom the estate came to the Lindsays by marriage in the middle of the fourteenth century. The keep probably dates from the latter half of the fifteenth century. The shape of the port-holes for guns, the projection for the comparatively wide staircase (breaking the simple square form), and the design of the corbels under the parapet (Fig. 313), are features which point to that date. The corbels are specially worthy of note. This is a striking and early instance of corbels used purely for ornament. There are two tiers of apparent corbels in the cornice under the parapet, but the lower tier is entirely useless. In the older corbelling there were sometimes several tiers of corbels, but they were always one above the other, the upper ones being supported by those below. But here the corbels are placed, not over one another, but alternately, so as to produce a chequered effect,

the result being that the upper corbels (which project only the same distance as the lower ones) are alone useful in carrying the parapet. The

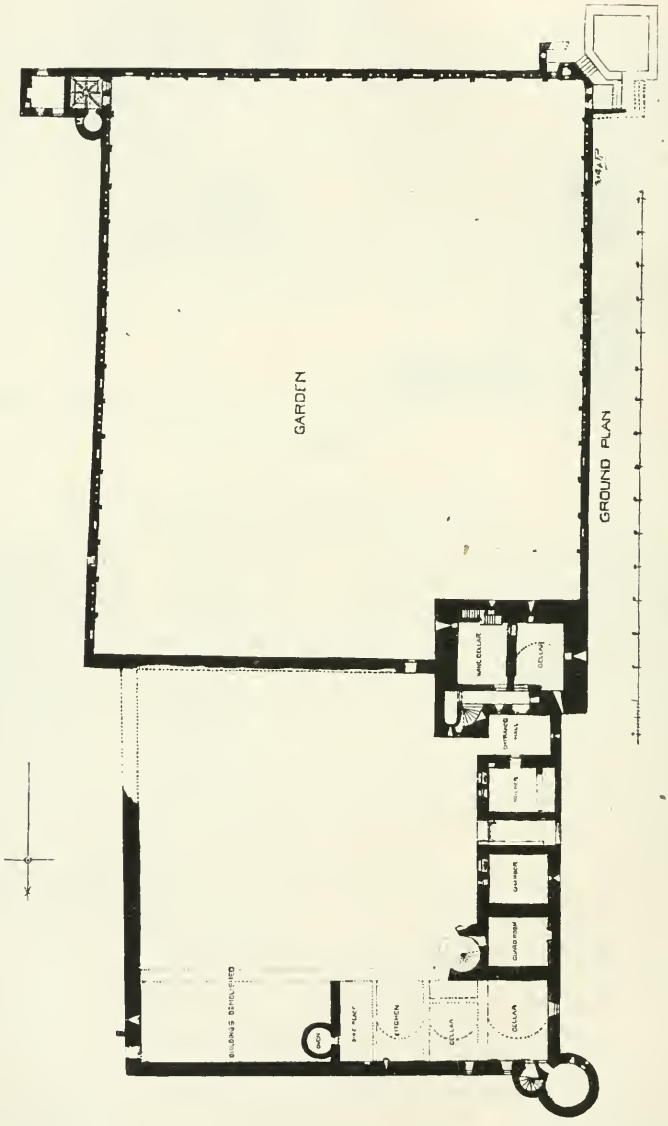


Fig. 312.—Edzell Castle. Ground Plan.

lower tier of corbels carries nothing, and simply forms an ornament or enrichment.

This is a form of corbelling which was introduced about the end of

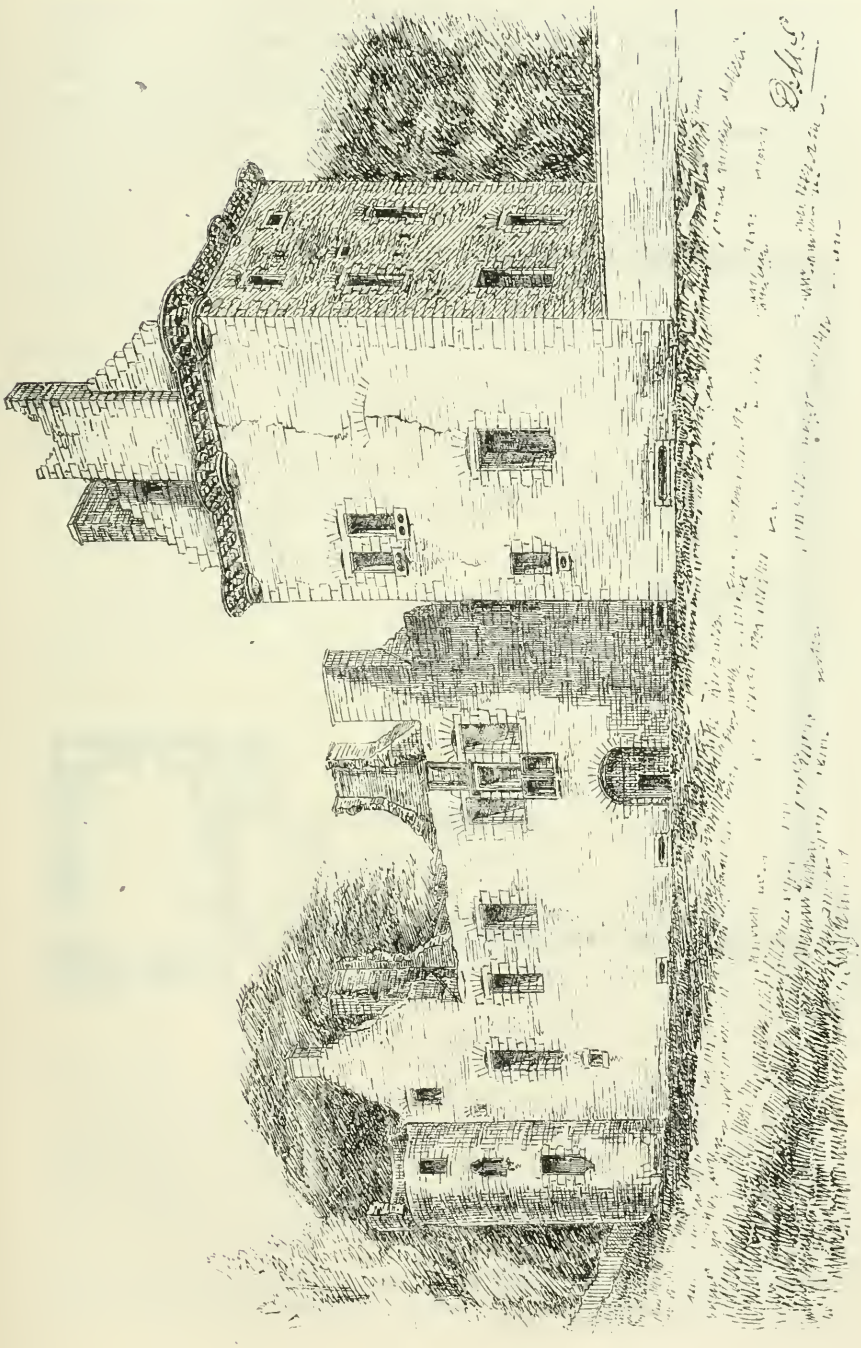


Fig. 313.—Edzell Castle. View from the South-West.

the fifteenth century, when the primitive, simple features of the earlier style began to yield to the growing taste for ornament. Numerous examples of this form of enrichment are to be met with in all parts of the country. As we shall afterwards see, the degradation of the corbel into mere ornament was gradually pushed to such an extent that at last the purpose of the corbel was entirely lost to view, and it became a mere chequer ornament.

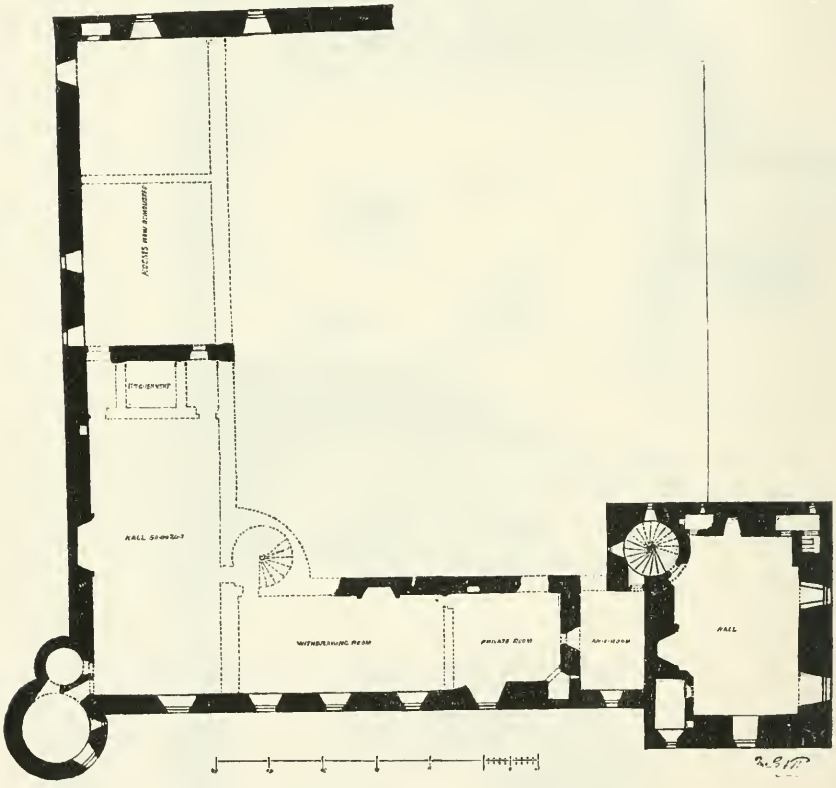


Fig. 314.—Edzell Castle. Plan of First Floor.

There is nothing very special in the arrangements of the keep.

There are two cellars on the ground floor, one with the usual private stair from the hall. The hall occupies the first floor (Fig. 314), and has an elegant little vaulted private room in the north-west angle. The upper stories appear to have had the usual arrangements, but the floors are now gone.

In connection with this simple keep a very extensive quadrangle was erected by David, ninth Earl of Crawford, at the end of the sixteenth

century. The buildings on the west side of the quadrangle are still fairly preserved; those on the north side are very much ruined, while on the east and south sides they have, with the exception of the outer wall, been entirely removed (Fig. 312).

The west range contains, on the ground floor, a kitchen, an arched passage forming the principal entrance into the courtyard, and various cellars and stores. On the north side we find traces of a most extensive kitchen, the fireplace having apparently been 23 feet wide by 10 feet deep. From this fireplace there is an access to a large oven, and in the kitchen a drain to the outside. The other buildings no doubt contained the bakehouse, the brewery, etc., while the stables and other offices were probably on the other sides of the courtyard. On the first floor the buildings in the quadrangle contained the great hall, 50 feet by 24 feet, at the north-west angle, and adjoining it, in the west range, were apartments which seem to have been the withdrawing-room and a private room, or bedroom, with an anteroom connecting this suite with the old keep by a door opened for that purpose in the staircase of the keep.

The round tower at the north-west angle would no doubt be a private room off the hall. It has a private stair down to the wine-cellar, and up to bedrooms above.

The principal entrance to these apartments was by a turret staircase in the north-west angle of the courtyard. Some portions of the entrance doorway are still visible in this turret, with the thin pilaster mouldings in use about the end of the sixteenth century.

To the east of the hall there were other large apartments, probably bedrooms, but they are now completely obliterated, except the outer wall with its windows. There are also some traces of a tower at the north-east angle.

To the south of the quadrangle is situated the pleasure garden. Such gardens were not unusual in connection with the Scottish castles of the time of Queen Mary and James VI., but there is no other so well preserved, or where the architecture has been so fine. This garden is 173 feet long by 144 feet wide, and is enclosed on three sides with an elaborately decorated wall. Each side is divided into compartments 10 to 11 feet wide (Fig. 315), separated by what appear to have been square shafts. The bases, caps, and central bands still remain built into the walls, but the shafts are gone.

In the central band we have an example of the re-introduction in late work of the enrichments of an earlier time, the dog-tooth of the thirteenth century being the enrichment used here about 1600.

The compartments are arranged in two alternating designs, one containing a single recess for flowers, 3 feet wide and 2 feet 6 inches high, with a carved bas-relief above, and the other containing three rows of small recesses (about 16 inches square) arranged chequerwise, with

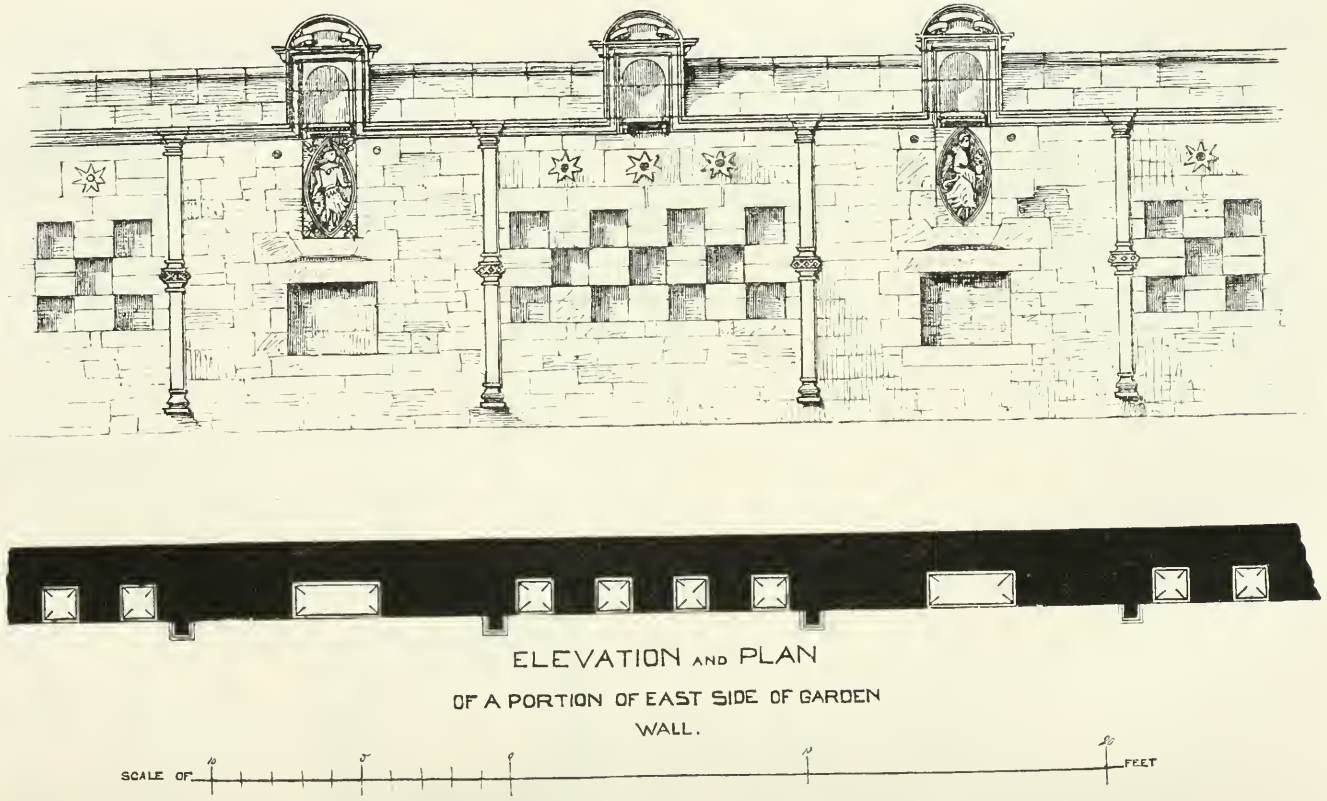


Fig. 315.—Edzell Castle. Portion of East Side of Garden Wall.

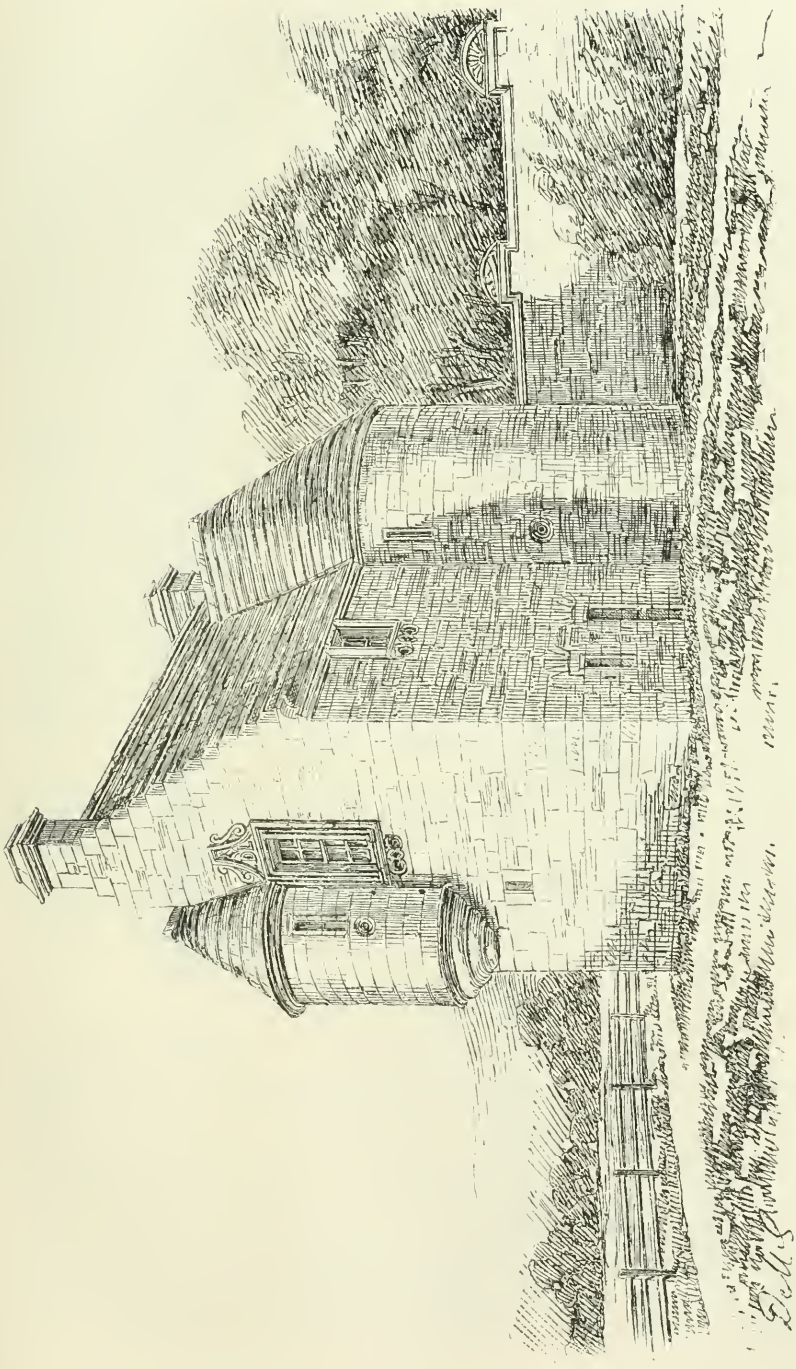


Fig. 316.—Edzell Castle. View of Lodge from the Exterior.

three stars above pierced in the centre as shot-holes. Over the centre of each compartment there is a small niche with a carved cushion, on which a bust or other ornament might rest. These cushions, although all very similar in design, have considerable variety of details. Over the niches is a small curved pediment containing a scroll. All the above-mentioned recesses have the sill hollowed out as if for the reception of soil for a flower or plant. It is supposed that the chequered design and the three stars represent those figures in the Lindsay arms, which are gules, a fesse chequé argent and azure, with three stars in chief of the second.

The bas-reliefs are in the somewhat debased style of sculpture prevalent at the period, but are very varied in design. Those on the east wall represent the Celestial Deities, those on the south wall the Sciences, and those on the west wall the Theological and Cardinal Virtues.

At the south-east angle of the garden stands the very picturesque lodge and garden-house (Figs. 312 and 316), with monogram of David Lindsay entwined with foliage carved in the tympanums over the windows. The lodge is a single room entering from the exterior. The garden-house enters from the garden, and has a ribbed and groined vault, and stone seat all round. From this room a turret stair conducts to two rooms in the upper floor, which may have been used as fruit rooms. At the south-west angle of the garden are situated the well, and the remains of what was probably a bath-house. The well is carefully built in the thickness of the garden wall, and access is provided to it both from the garden and a small room attached to the bath-house, in which there is a stone sink for emptying out water.

Notwithstanding the ruinous state of the quadrangle, its great extent, and the elegant and commodious arrangements of the pleasure garden of Edzell, give an impressive idea of the advancement and refinement of the last years of the sixteenth century.

The castle now belongs to the Earl of Dalhousie, and the ruins are well taken care of.

ROSSLYN CASTLE, Midlothian.

On a rocky promontory projecting into the haughs lying along the banks of the North Esk stands the Castle of Rosslyn. The river winds round the castle on three sides. On the north-west a calm and rather sluggish stream, it rounds the point of the promontory, and dashing over a lynn it enters a wild rocky gorge, and rushes past the south-east side of the castle at a distance of forty or fifty yards. The natural approach to the castle (Fig. 317) was by a narrow ridge of rock, which has been cut through at the neck of the promontory. A high access bridge is thrown across the chasm (Fig. 318), but it was undoubtedly originally spanned by a drawbridge. Through this cutting a road

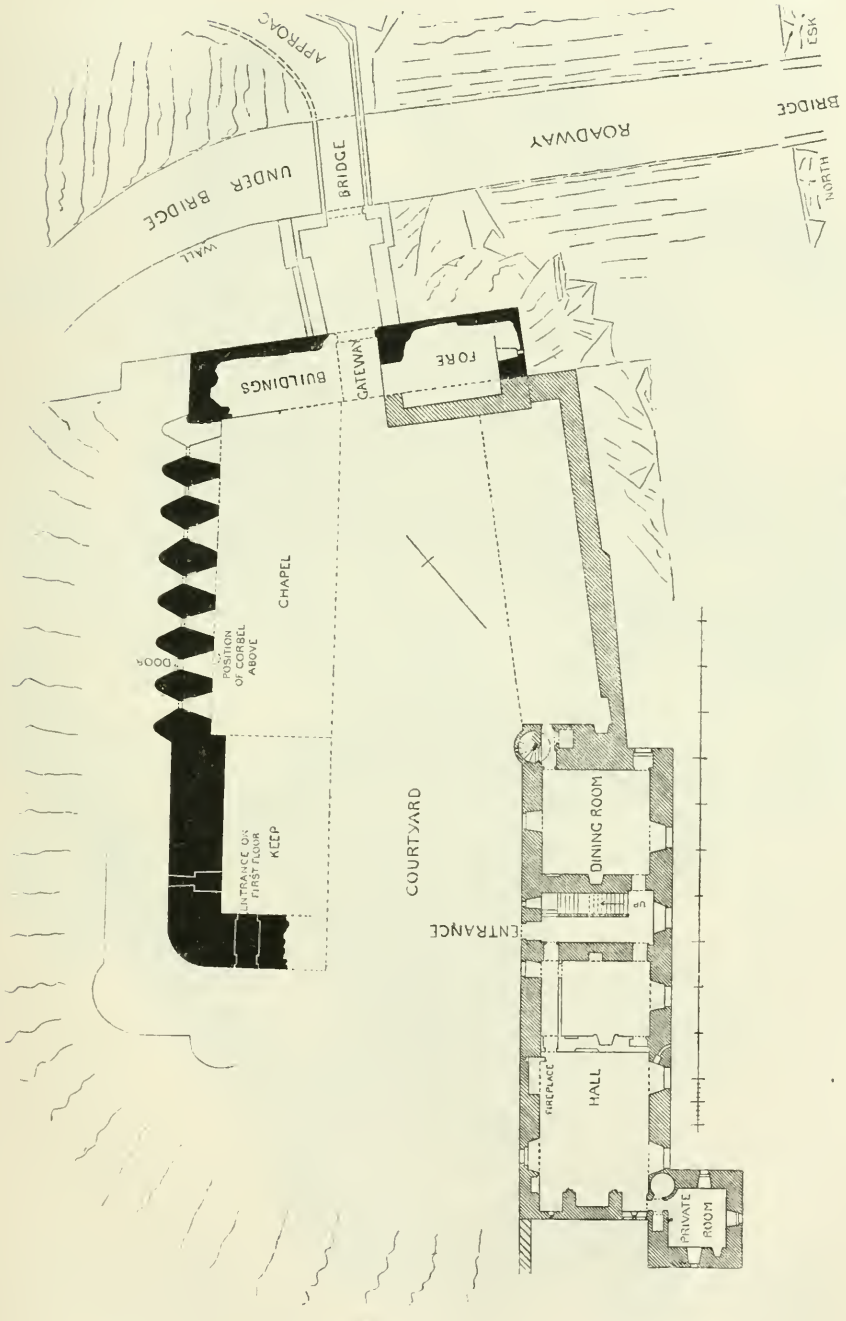


Fig. 317.—Rosslyn Castle, Ground Plan.

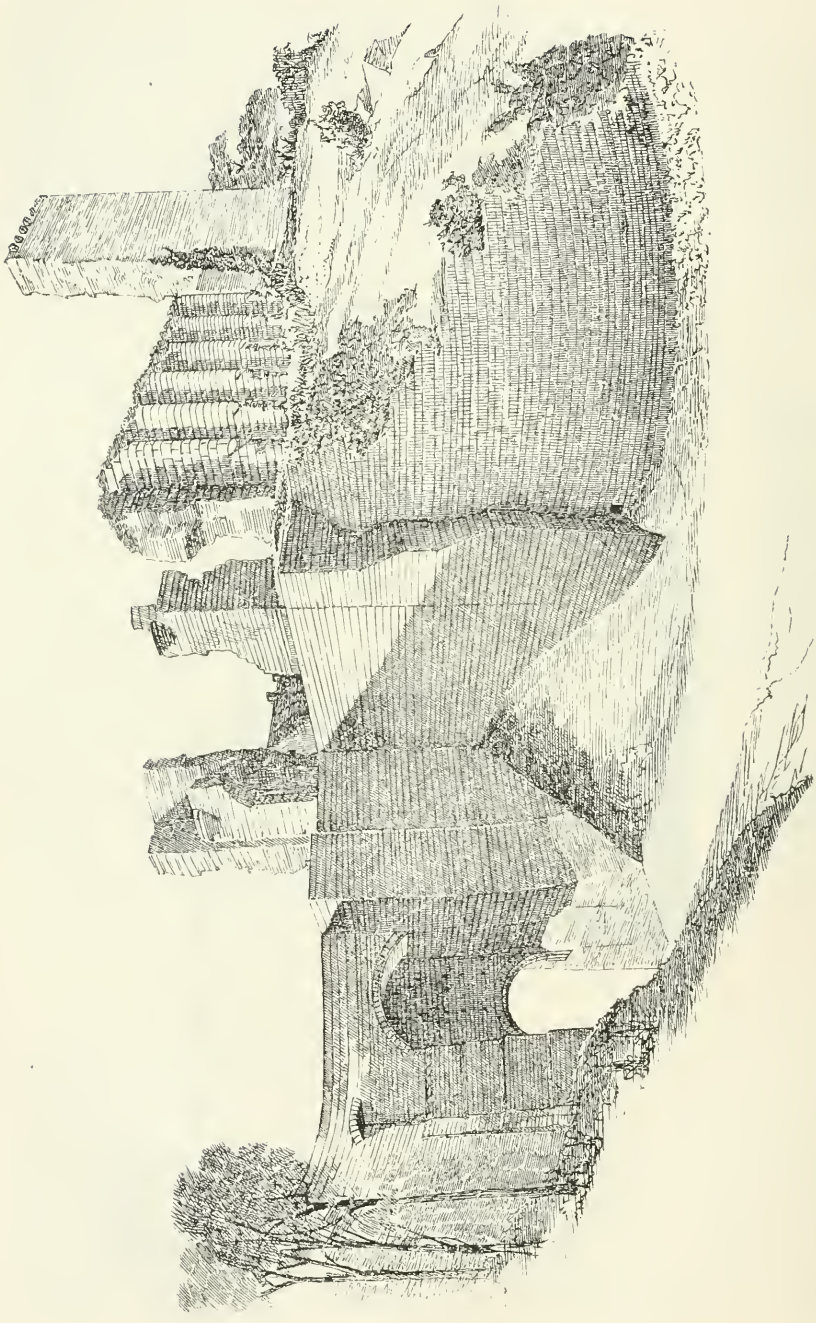


Fig. 318.—Rosslyn Castle. View from the North-West.

led straight down to the river which was crossed by another bridge, now only represented by a part of the ruined arch on the castle side (but shown as if complete in the general view from the north-east, Fig. 319). The high bridge was evidently further defended by a gate close to its

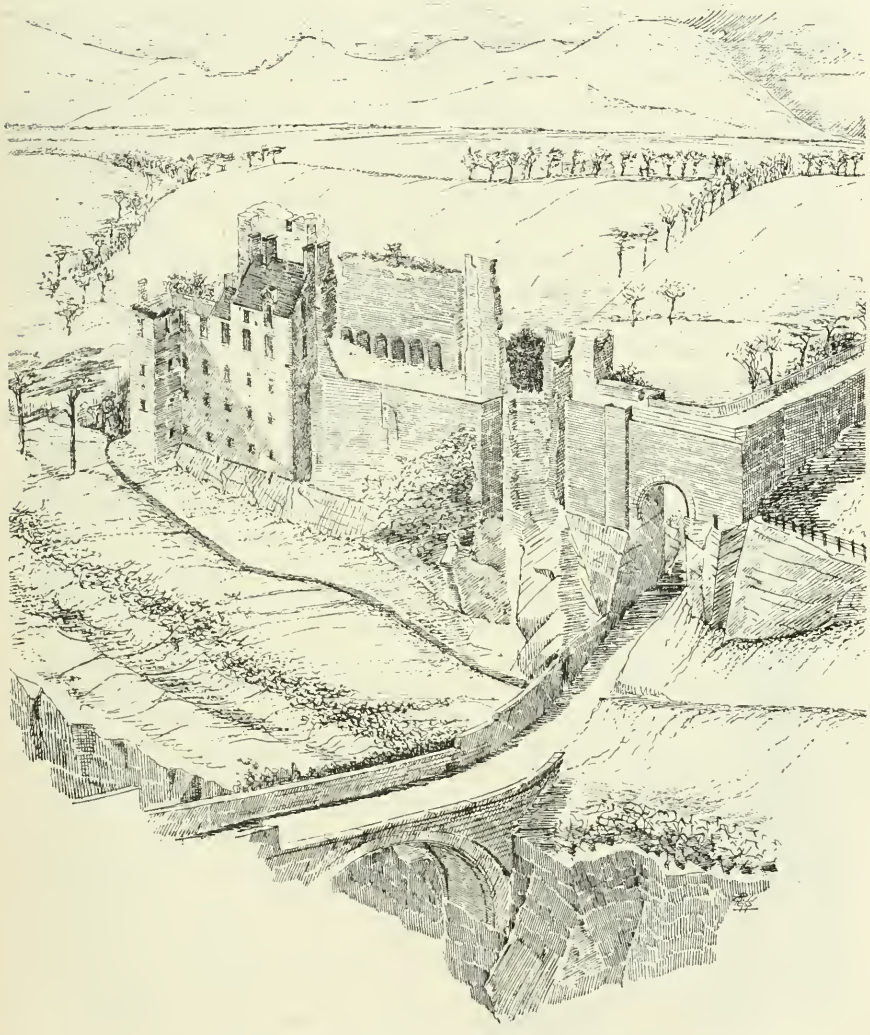


Fig. 319.—Rosslyn Castle. General View from the North-East.

southern end, as part of the rybats for hanging it to still exist. At 27 feet back from this gate rise the ruined outer walls of the castle, through which a gateway gave access to the courtyard. Above the gateway was

a gatehouse with round turrets facing the bridge, of which the corbelling and some courses of masonry still remain (Fig. 318). On the east side of the gateway the ruins of a square tower may still be traced, while broken walls indicate the existence of buildings on the west. The keep, which is situated at the opposite or southern end of the courtyard, and on the highest part of the ground, is the oldest part of the castle. Its west wall stands entire up to the corbelling of the parapet, and part of its south wall remains to the same height. Of its interior arrangements little can now be learned. It was arched on the ground floor, and was five stories in height; the principal entrance was at the level of the first or hall floor on the side furthest away from the bridge, where one of the jambs of the doorway may still be observed. The entrance to the ground floor cannot now be determined, owing to the mass of ruins occupying the space, and for the same reason the width of the keep is unknown. Its length, however, can be clearly ascertained to be 50 feet 3 inches. The south-west corner of the keep is rounded, and the corbels of the side and end walls stop at the round which, with a plain face, was evidently continued higher than those walls as a staircase turret to the roof. According to Father Hay, the historian of the family of St. Clair, this keep was erected about the end of the fourteenth century by Henry St. Clair, Earl of Orkney. Continuing northwards, in a line with the keep, was what Father Hay calls the chapel, of which the west wall only now remains. It is of a singular description, being composed of eight buttresses or "rounds," as they are called, wedge shaped on plan, with rounded outer faces (Figs. 317 and 320). These are placed 2 feet apart at the wall, and project 5 feet 4 inches. The existing remains give no indications of how the rounds were finished at the top, but Father Hay, whose life covered nearly the whole of the seventeenth century, thus describes them: "He (William St. Clair) builded the church walls of Rosslyn, having rounds, with fair chambers and galleries thereon." From this description it seems probable, either that arches were thrown from "round" to "round," and a gallery continued along the top, or that a parapet ran round the wall-heads of the buttresses as well as the top of the wall, in which case the former

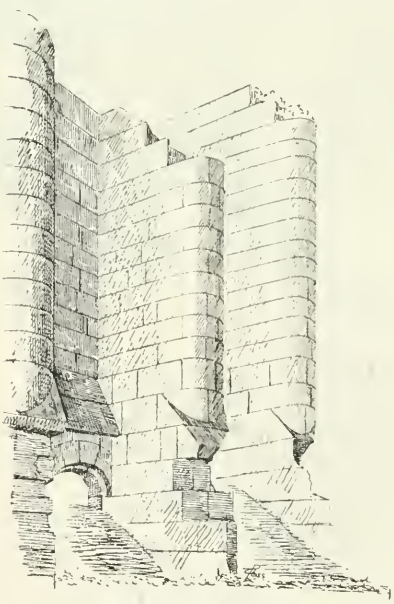


FIG. 320.—Rosslyn Castle.
The "Rounds" of the Wall of Enceinte.

would create recesses (such as are sometimes met with over the piers of bridges), and would thus represent the "fair chambers," while the parapet walk at the wall-head would form the "galleries." Sir William succeeded his father, Henry, just referred to, in the beginning of the fifteenth century, and died about 1484. He was a great builder, and founded the famous Collegiate Church of Rosslyn in 1450. There are small windows between the "rounds" on the ground floor, having widely splayed jambs and a flat arch on the inside, with shutter recesses cut in the former. In one case there is a door, finished in the same way as the windows on the inside, with a sloped tabling outside above the door (Fig. 320). Near the top of this wall, on the inside, there is a round moulded corbel at the position shown on the plan, which was in some way doubtless connected with the parapet walk or gallery (see sketch, Fig. 321). There are no indications of any buildings having stood where Father Hay describes the church to have been; and there is no appearance of there having been either cross partitions or floors to divide it into stories. Sir William is further said by Father Hay to have built the fore-work on the north side of the entrance gateway and the bridge crossing the river, and in all probability the gatehouse containing the entrance was also his work. The tower or fore-work on the east side of the gateway, along with the under part of the wall extending eastwards, seems to be older than Sir William's work, and may have been erected about the same time as the keep, as part of the walls of enceinte which probably surrounded the whole castle area. Owing to the almost perpendicular configuration of the rocks, this wall and the tower on its two outer extremities rise from a considerable depth below the court level. There are remains of a wall running along the west and south sides of the keep, at a distance of about 13 feet from the wall. It probably continued along in front of the "rounds" till it reached the high retaining wall at the roadway (Fig. 318). In a drawing, dated 1700, in the Advocates' Library, a wall is shown in this position, with rounded towers at the south-western end, as indicated on the plan. There are also great fragments of walls at the bottom of the hill round the north-west and part of the south sides, which may have fallen from above. The castle seems to have been of the extent above described when, in 1544, it was burned by the Earl of Hertford.

The next builder at Rosslyn was also a Sir William, who constructed the large addition shown on the plan at the south-east side of the courtyard. This consists (Fig. 321) of three stories below the level of the court, with about 10 feet of additional depth of bare rock to the surface of the ground, being a depth altogether from the courtyard to the ground of about 52 feet. Owing to the confined nature of the site, it was necessary, in order to preserve a good courtyard, to bring up the outer wall of these new buildings from near the base of the rock, which was scarped below the foundations for security (Fig. 321). The three

Fig. 321.—Rosslyn Castle. Plan of Basement and Section.

stories below the level of the courtyard were thus a necessity. These stories are arched in stone, while those above the court level are joisted in timber. A wide easy staircase gives access down from the level of the court to the various floors (Figs. 317 and 321), while from the middle or bakery floor a door leads to the outside at the west end of the passage, the ground being there at the same level as that floor.

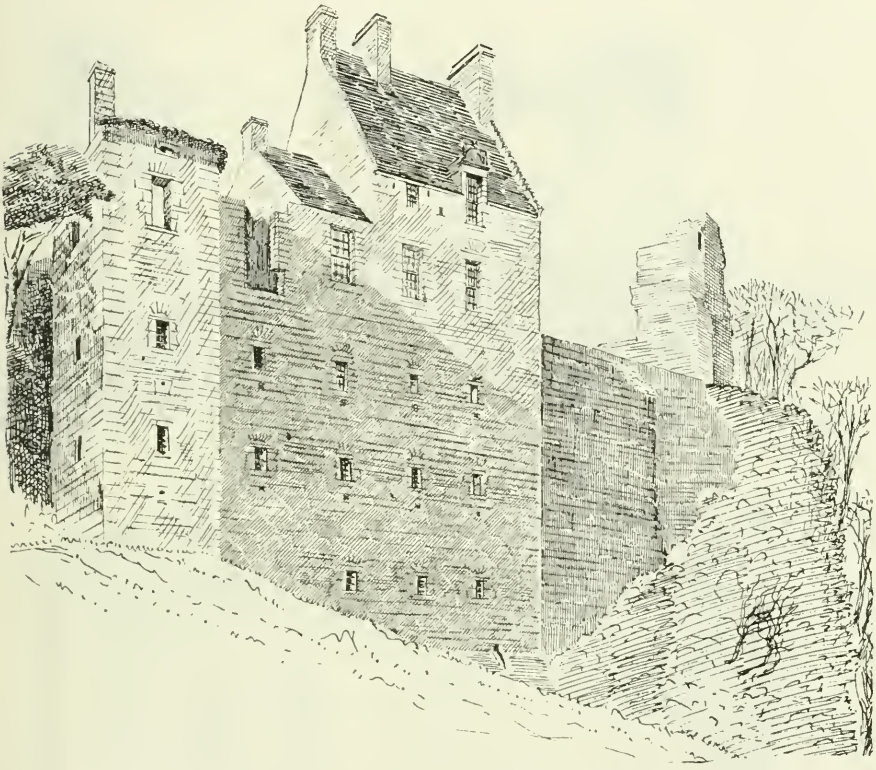


Fig. 322.—Rosslyn Castle. View from the South-East.

In the basement floor is situated the kitchen, having a large fireplace with a small window in it, about 6 feet above the floor. A passage leads from the kitchen to the other end of the building, from which the various rooms are entered. The first and second floors above are similar in arrangement. On the first floor over the kitchen is situated the bakery, with an oven in the corner where shown on section. From the great hall, situated on the level of the courtyard, a small private newel stair leads down to the cellars on the floor below (Fig. 317). Beneath the window-sills of the three under stories are small round shot-holes, splayed only to the inside. In the arched roofs of the passages a hatch is constructed for a hoist from the kitchen, etc., and in the passages on each floor are recesses for lamps. The great hall

was a room 54 feet long by 23 feet wide, with a fine moulded fireplace (Fig. 323), bearing a shield with the arms and initials of Sir William and his wife, Jean Edmonston, and the date 1597. In the jamb of the opposite window is a piscina-looking recess, probably used as a wash-hand basin. In the end of the hall there is a recess, but it is so ruined that its purpose cannot be determined. It may have been for a seat, a side-

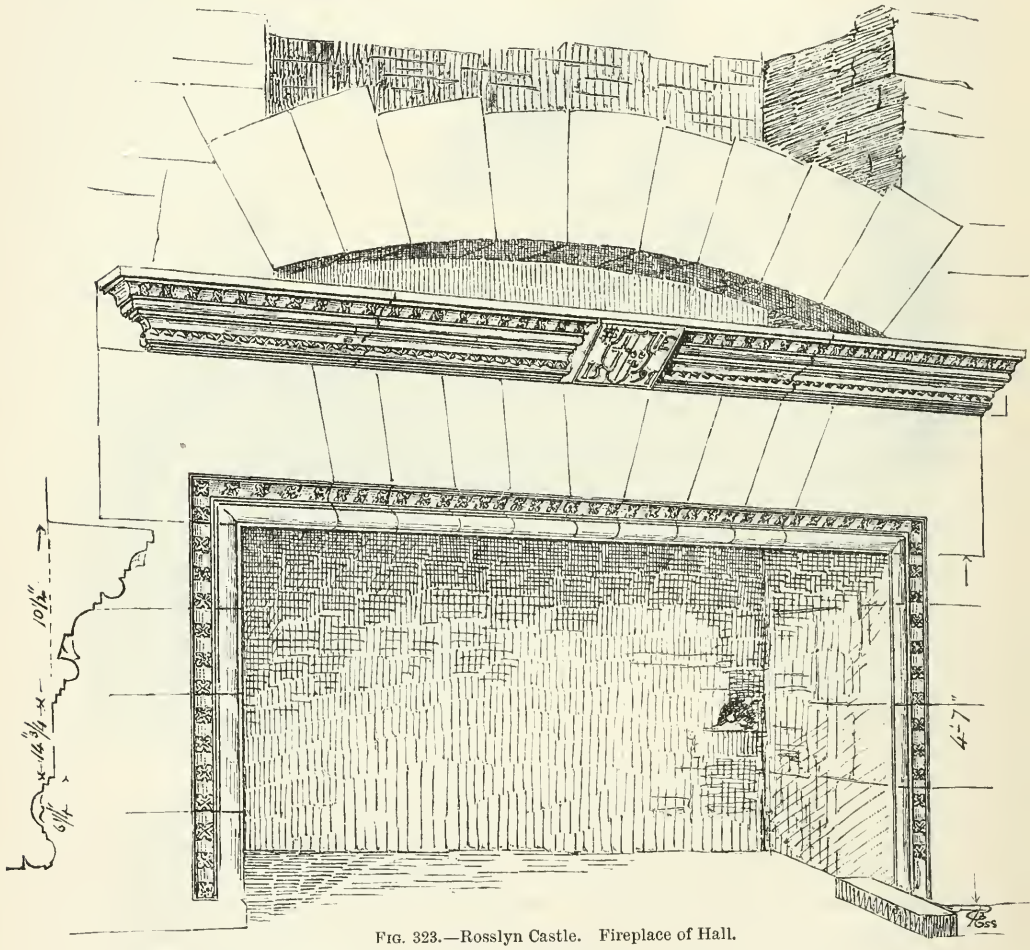


Fig. 323.—Rosslyn Castle. Fireplace of Hall.

board, or even a second fireplace. Sir William seems to have built the three under stories just described, and the hall. In 1622, his son, of the same name, completed the buildings north of the staircase above this level (Fig. 324). Thereafter they remained as they now stand, except that at some later period the hall has been cut in two by a wall, the lines of which are shown on the plan. On the outer doorway, and dormer

(Fig. 324), and on the plaster ceiling, a view of which is given (Fig. 325), are his initials with the above date.

Part of the space beneath the courtyard is supposed to contain vaulted chambers. The construction of the bridge leading to the castle

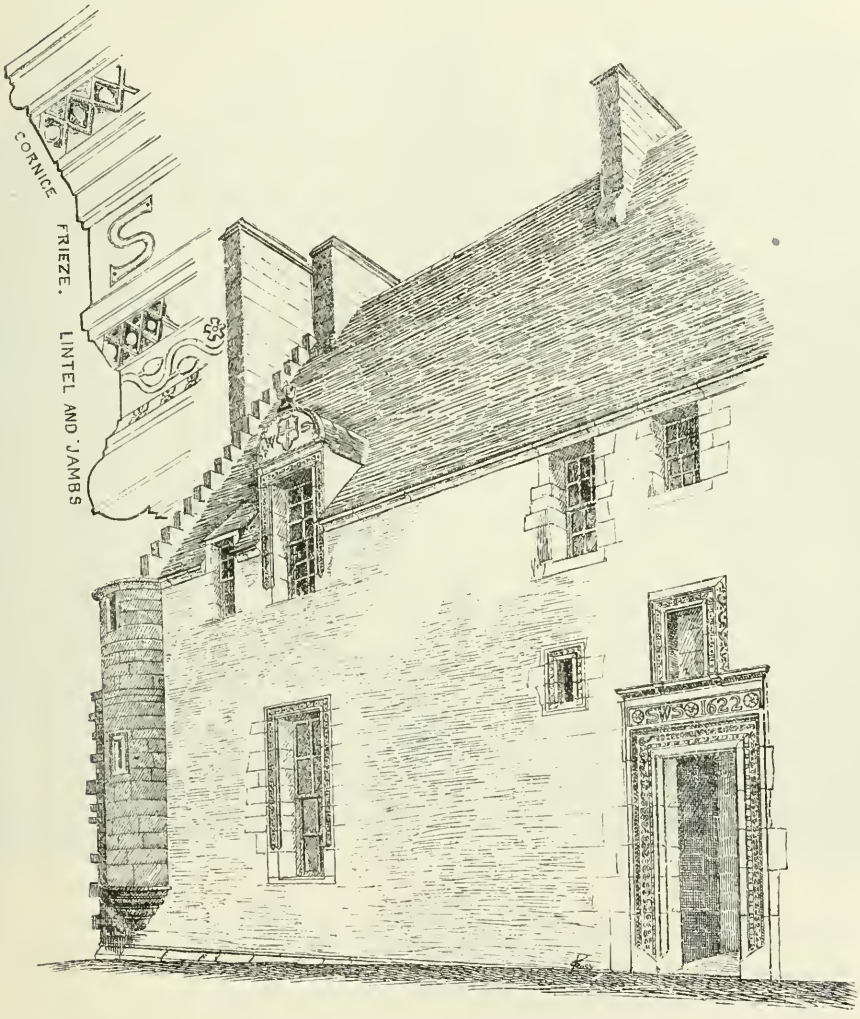


Fig. 324.—Rosslyn Castle. East Side of Courtyard.

is peculiar, the ring next the river being some 12 or 15 feet lower than the portion bearing the roadway (Fig. 318).

The various portions of the castle correspond in style with the periods at which they are said to have been built. We have first the fifteenth-century buildings, consisting of the keep, and the enclosing walls defended by a drawbridge and gatehouse.

In the later buildings, again, we see the more enlarged requirements of the end of the sixteenth and beginning of the seventeenth century met by the extensive accommodation in the basement floors, the large and elegant hall, the withdrawing-room with elaborately ornamented ceiling, on the level of the courtyard, and the bedrooms above, which

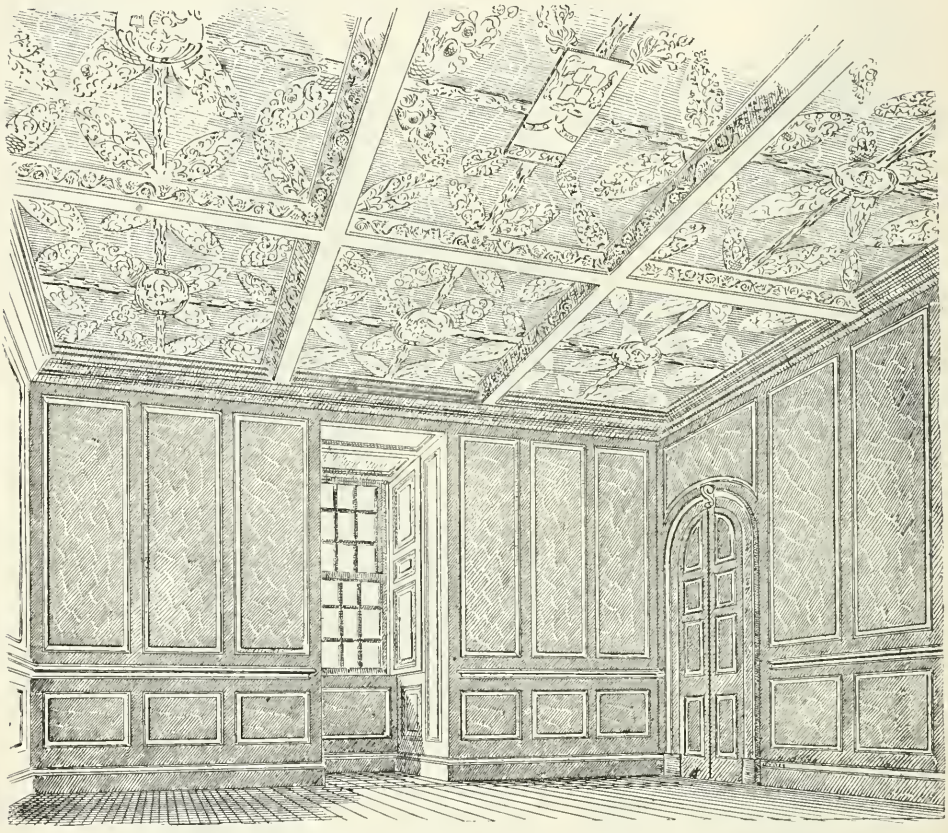


Fig. 325.—Rosslyn Castle. Interior of Dining Room.

are approached by a wide square stair at one end, and by a private newel stair in a projecting turret at the other.

A very remarkable and quite unique feature in this castle is the west wall of enceinte, with its buttresses or "rounds." We are not aware of any other castle provided with similar defences. The only example at all analogous to it is that of the wall of enceinte of the Château Gaillard, before referred to (Fig. 20).[1]

[1] An interesting and valuable paper on 'Rosslyn Castle: its Buildings Past and Present,' will be found in vol. xii. p. 412, of the *Proceedings of the Society of Antiquaries of Scotland.*

BALGONIE CASTLE, Fifeshire.

Balgonie Castle, in the immediate neighbourhood of Markinch, Fifeshire, is situated in a large and beautifully wooded park, with its northern side on the edge of a steep sloping bank some 25 or 30 feet high. A double moat, with a large mound between, protects the castle on the other sides. The buildings consist (Fig. 326) of a courtyard with a lofty

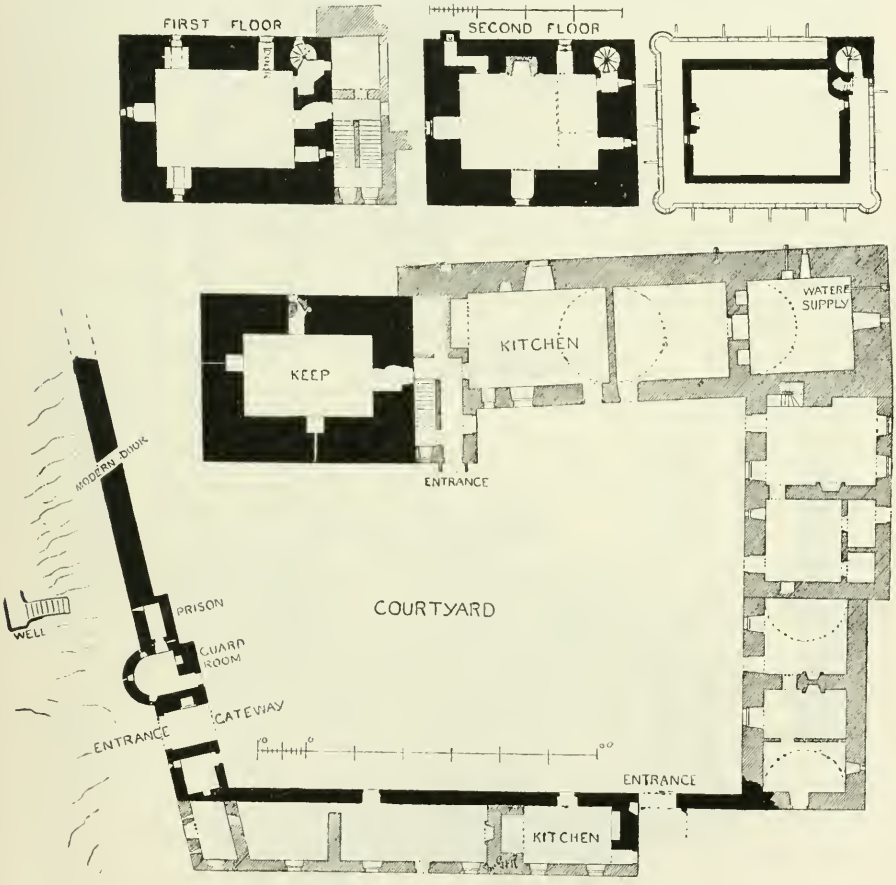


Fig. 326.—Balgonie Castle. Plans.

keep at the north-west corner, and enclosing walls, within and outside of which later additions have been made. The arched entrance to the courtyard is at the south-west corner in the west wall, which is here 11 feet thick, and is guarded with a round tower. This tower is entered from the courtyard; it is vaulted, and provided with shot-holes. Adjoin-

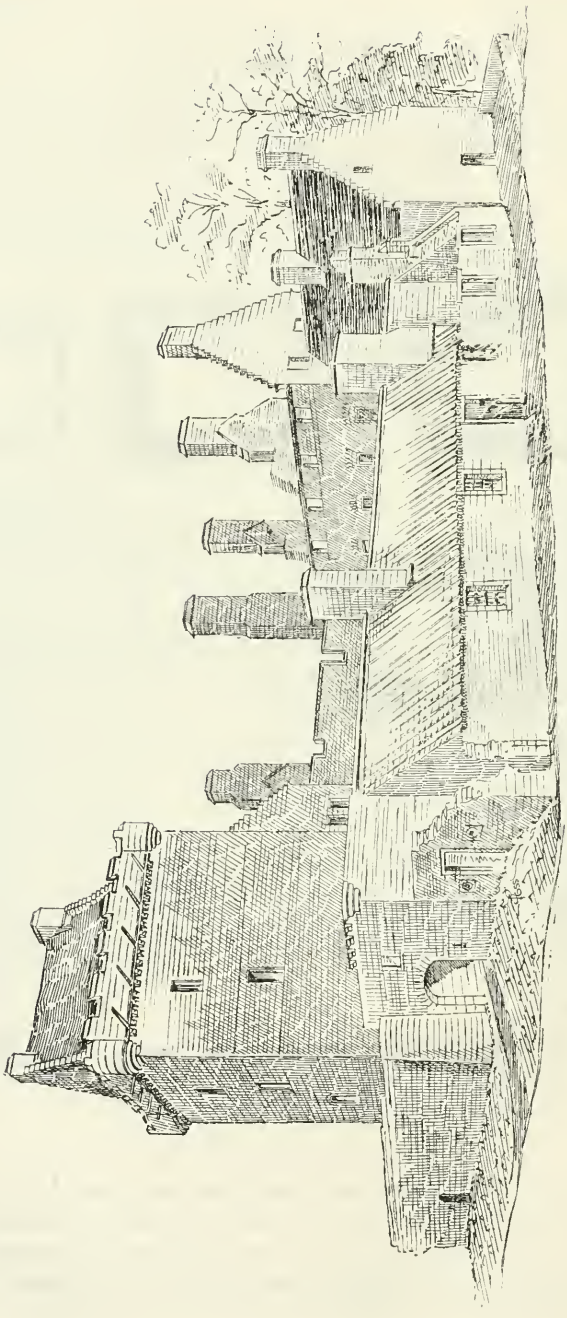


Fig. 327.—Balgonie Castle. View from the South-West.

ing it is a small chamber with walls sloping inwards, till they nearly meet at the top, which is entered from the tower by a door 3 feet high, and 3 feet 8 inches above the floor. This singular chamber, which was doubtless the prison, has a slit 4 inches wide opposite the well, which is outside the walls, and in the first ditch or moat. There is another arched chamber in the thickness of the wall on the south side of the entrance.

There were rooms above the entrance, now in a very ruinous condition. These rooms may have been used for the working of a bridge, and were probably reached by some kind of moveable steps. A projecting turret at the south-west corner (Fig. 327), and a few remaining corbels beside it indicate the height of the enclosing walls.

At the south-east corner of the courtyard there is another entrance. It has been through a tower projecting to the outside, and shown by dotted lines on the plan. Only two of the sides of this tower remain. The west wall contained a shot-hole, now built up by the fireplace of the more modern kitchen, which has been added. Indications of the other sides of the tower exist. Above this entrance, on the inside, is a row of notched corbels for carrying some kind of platform.

How far the east and north curtain walls extended cannot be determined. Possibly they are partly incorporated in the outside walls of the more recent buildings. It will be observed that the north wall and the return of the east wall are of great thickness.

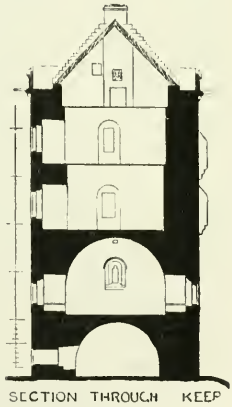


Fig. 328.—Balgonie Castle. Section.

The west curtain breaks off abruptly before reaching the steep bank, to the edge of which it no doubt extended.

The keep, which is 43 feet 9 inches long by 34 feet 9 inches wide, and 64 feet 7 inches high to the top of the parapets, contains five stories (Fig. 328), the basement and first floor being vaulted.

The present scale stair adjoining the keep, and giving access to it, belongs to the more modern buildings. Originally the ground floor was not in communication with those above. The first floor, containing a large hall of finely finished masonry, measures 28 feet 8 inches by 20 feet 6 inches. It was reached by moveable steps, the door being at a height of about 12 feet above the ground on the north side, a most inconvenient place, owing to the slope of the ground, but doubtless so placed for security.

There are large seated windows with shutters in this hall, one of the latter being still in position. Some of the windows are pointed and cusped, but there is no fireplace. Above the end windows, and close to the arched roof, there are small openings about 12 inches square, evidently meant for ventilation. From the north-east corner a turnpike

leads to the upper floors and the battlements. On the second floor is the principal hall, with a large fireplace on the north side, which has been reduced in size during the later occupancy of the castle. Adjoining this is a projecting garde-robe with a sloping stone roof, and on the floor above a similar garde-robe projects right above this one.

The battlements, with projecting circular open bartizans at three of the angles, and the parapets and gargoyles, which are all in perfect preservation, indicate fifteenth-century work (see Plan of Roof, Fig. 326, and Fig. 329). Over the fireplace of the upper room there is an ornamental panel, containing what seems to be a coat of arms, but, the room not being accessible, it cannot be described. From the battlements a narrow stair leads up to a cape house, or watch turret, at the north-east angle, over the wheel stair, which is seen rising above the parapet in the view from the courtyard.

When the later additions came to be made in the seventeenth century, the keep was somewhat modernised to suit the altered times. A scale stair was built alongside, serving for the old and new buildings. The latter extend eastwards, and southwards to the south curtain, with a range of one-story offices outside the latter. There was thus formed a quadrangle surrounded with buildings, and measuring 130 feet from east to west by 80 feet from north to south. The buildings along the north side, and half-way along the east side, are three stories high (Fig. 327), and are in ruins. The remaining half of the east side is two stories high, and is still inhabited as labourers' cottages, which contain some of the original plaster decorations, such as arms and monograms.

The entrance doorway to the staircase was originally in the east wall, at the projection of the staircase into the courtyard (Fig. 326), with a moulded architrave outside, having the shouldered lintel characteristic of the period (Fig. 329). The shallow projecting porch on the south face, with its doorway, is an addition.

The first floor contained suites of rooms leading through each other, after the manner of the seventeenth century, the sleeping apartments being on the floor above.

On the ground floor the buildings shown with a dotted semicircle on the plan are vaulted in fine masonry. The kitchen adjoins the main staircase. The two rooms beyond communicate with each other through a fine arched doorway with bead mouldings. The first of these apartments, which is only lighted by the doorway, seems to have been a stable, while the room beyond, feebly lighted, contains the water-supply from the outside through a stone conduit, with an outward drain.

From the adjoining room in the east range a stair leads up to the first floor.

In the range of low buildings outside the south curtain there is a second kitchen opening into the courtyard.

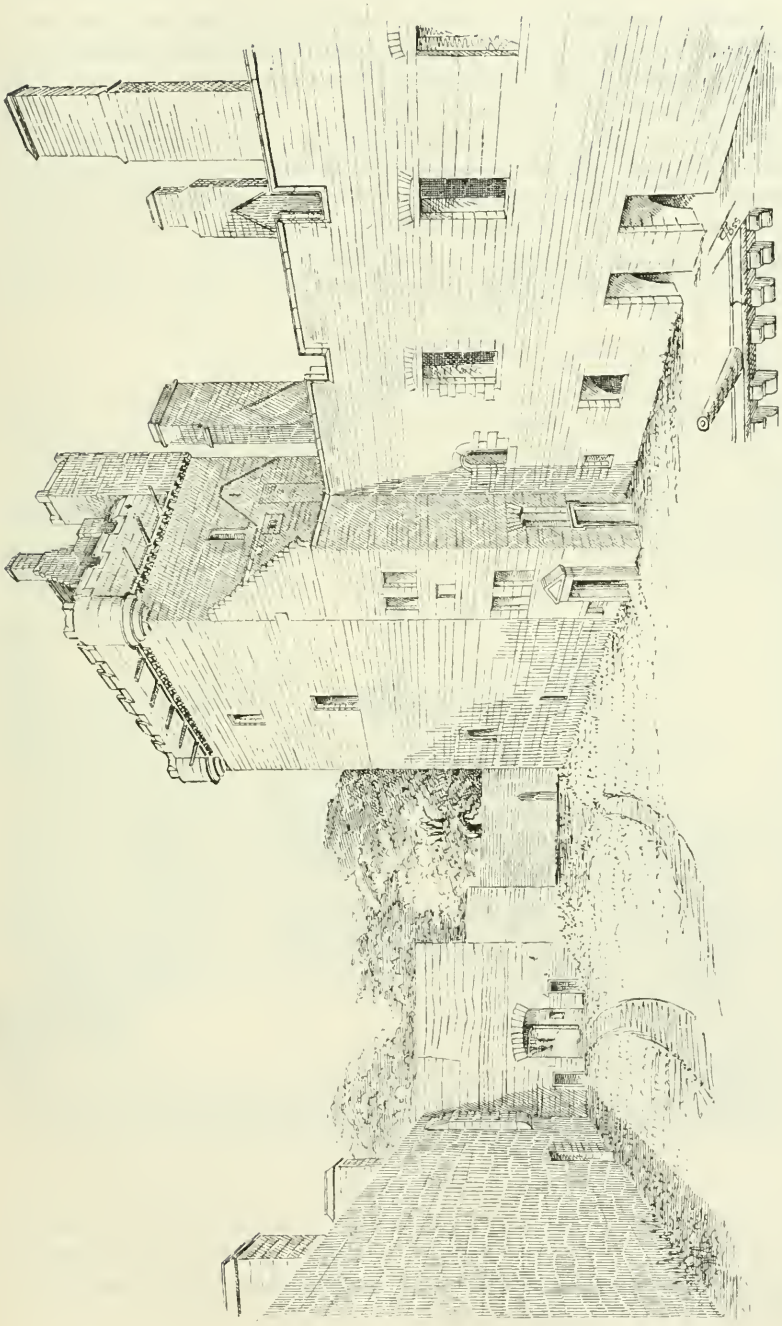


Fig. 329.—Balgonie Castle. View in Courtyard.

Balgonie has been a fine residence and has not long been abandoned. The keep in particular is one of the best of its class in Scotland. It may be regarded as quite entire in its masonry, only the wooden floors of the two upper stories being wanting.

Balgonie belonged to the Sibbald family down to the end of the fifteenth century, and the keep, with enclosure, were in all likelihood built by them earlier in the century. Through deficiency of male heirs, the estate passed by marriage to Robert de Lundin. In the time of Charles I. the place was purchased by General Alexander Leslie, created Earl of Leven, by whom in all probability most of the additions were made.

KILCHURN CASTLE, Argyllshire.

Kilchurn Castle, on Loch Awe (Fig. 330), so well known from the beauty of its situation, which makes it a favourite subject with our artists, is a specimen from a remoter part of the country of the original keep, afterwards converted into a castle with quadrangle. This keep was built about the middle of the fifteenth century by Sir Colin Campbell of Glenorchy, the Black Knight of Rhodes, and the founder of the Breadalbane family.

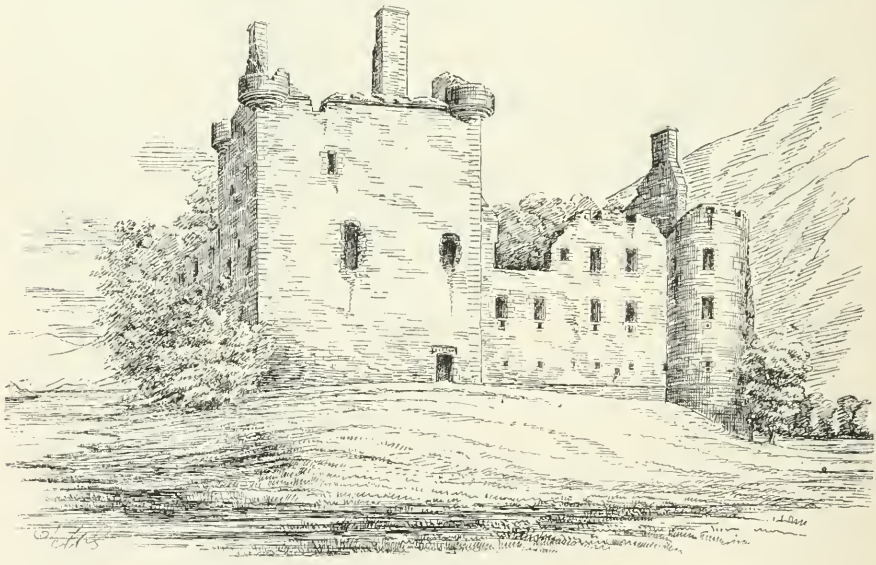


Fig. 330.—Kilchurn Castle. View from the North-East.

It is situated on a peninsula at the north end of Loch Awe, and is well protected by water and marsh, while the buildings stand on a rocky platform of irregular shape, but with perpendicular faces, about 15 feet high, on three of its sides.

The plan of this keep (Fig. 331) has some peculiarities. The entrance door is in the north wall, on the ground floor, and the stair to the upper floors starts from the opposite corner of that floor. The stair is unusually easy, being a square stair, so arranged that small vaulted rooms are provided on each side of it at the east end of the keep. The exterior is of the usual plain style, and is built with granite rubble-work. The corbels carrying the corner bartizans are all cut out of the hardest gneiss, or granite.

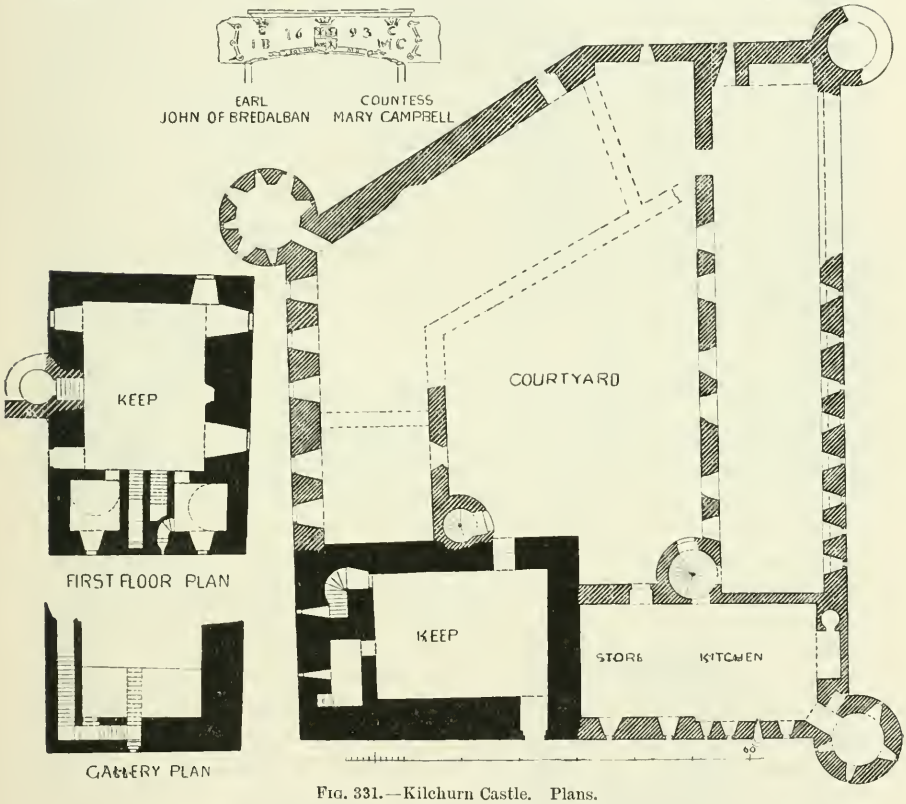


Fig. 331.—Kilchurn Castle. Plans.

The additions were built in 1693, this date being carved on the work in two places, viz., the entrance door and the door to the stair turret on the south side of the keep. The first of these inscriptions is rather remarkable, and might be misleading. The original lintel of the entrance door of the keep has been removed, and a new lintel (see sketch, Fig. 331) inserted, bearing the date 1693, and the initials and arms of John, first Earl of Breadalbane, and of his second wife, Countess Mary Stewart or Campbell.

Another curious circumstance connected with this door is, that it is the only entrance to the castle, so that to get into the quadrangle one

has to pass through the narrow entrance door, and across the ground floor of the keep.

The additions made in 1693 convert this keep into a castle surrounding an irregular quadrangle.

The additional buildings have been very extensive, and would accommodate a large garrison, but they are not built with a view to resist a siege. The round towers at the angles and the numerous square loopholes on the ground floor would, however, suffice to defend the garrison against a sudden attack by Highlanders, which was probably what was to be chiefly apprehended in that inaccessible situation. Although this castle presents a striking and imposing appearance at a distance, it is somewhat disappointing on closer inspection. The interior walls are much destroyed, and the internal arrangements of the plan can scarcely be made out. The buildings have more the appearance of modern barracks than of an old castle. There are two kitchen fireplaces, and probably there were officers' quarters and men's quarters, while the keep and some additional accommodation adjoining (on the east side) would be set apart for the lord and his family.

KILRAVOCK CASTLE, Nairnshire.

Originally this castle consisted of a quadrilateral keep, 39 feet by 31 feet, situated on the top of a steep bank above the river Nairn, and seven miles up from the town of the same name. The lands of Kilravock were acquired in the thirteenth century by Hugh Rose of Geddes, and have been in the same family ever since. The keep probably belongs to the fifteenth century, but it possesses few features whereby its age may be determined. The simple corbel table and bartizans of the parapet (Fig. 332) might even be of the fourteenth century; but the way in which the angle of the parapet over the staircase is carried up to form a watch-turret indicates a later date. In the History of the Family of Rose, by Rev. Hugh Rose, minister of Nairn, it is stated that in 1460 the Baron of Kilravock obtained a licence from the Lord of the Isles "to fund, big ande upmak a toure of fens with Barmkin ande bataling upon quhat place of strynth him best likis within the Barony of Kylrawok." The existing keep was probably built soon after. It has the ordinary characteristics of fifteenth-century towers, such as walls 7 feet in thickness, small windows in deeply-recessed bays, chambers in the walls a newel staircase in the thickness of one of the angles, a high window over the fireplace, and the adjoining wall-chamber off the hall.

In the seventeenth century the keep has been enlarged into a castle surrounding a courtyard in a rather unusual manner. A square staircase (Fig. 333) was built adjoining the south-west angle, and a large building attached to it, so as to form the south front of the quadrangle. The

basement floor of this building contains vaulted cellars, with a vaulted passage giving access to them.

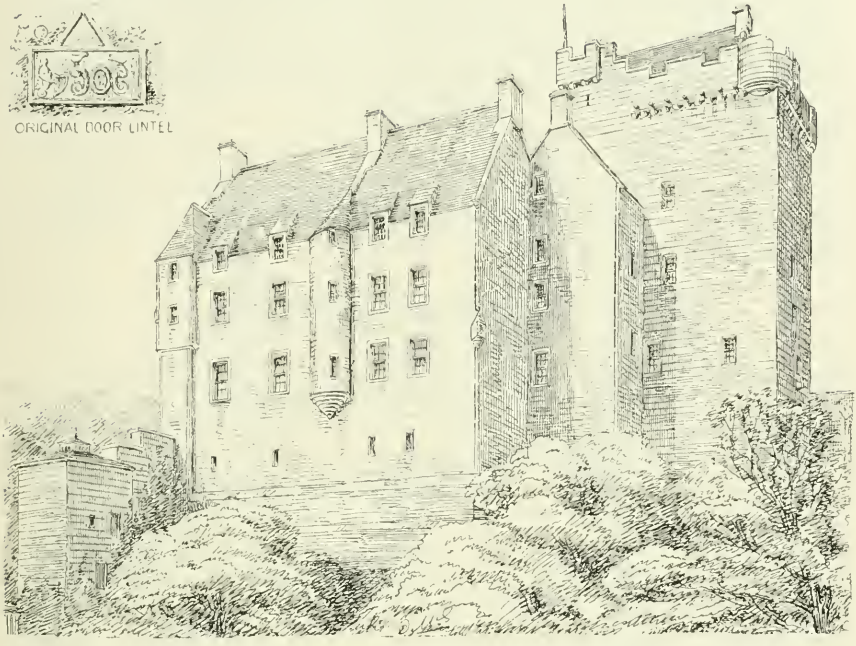


Fig. 332.—Kilravock Castle. View from the South-West.

The entrance doorway—the original lintel of which (see sketch, Fig. 332) is lying in the grounds—is in the staircase tower, and is

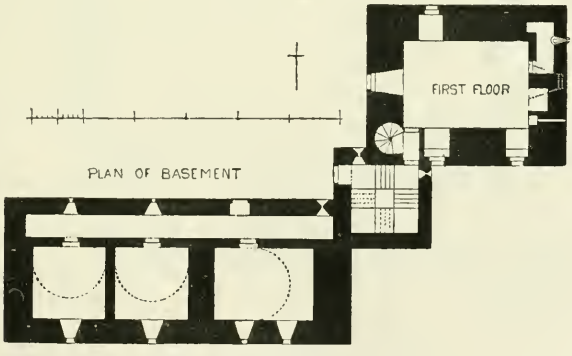


Fig. 333.—Kilravock Castle. Plans.

defended with a wide shot-hole from the basement passage. Other shot-holes from the staircase flank the keep, explaining the object of the

builder in planning the stair tower as he has done. The upper rooms of the south block are of a modern character, with private turret stairs, and angle closets, such as are usual in the seventeenth century, the stairs being arranged so as to give separate accesses to the various apartments. Although there is a corridor on the basement floor, there was none on the upper floors, the rooms on which occupied the full width of the block, and had separate access by the turret stairs.

In more recent times other buildings have been added to the north of the main house, so as to suit modern requirements, and a wing has been extended along the west side of the quadrangle, but these additions have been omitted in the plan.

BALVENY CASTLE, Banffshire.

This ancient fortress, which is said to have belonged successively to the Comyns, the Douglases, the Stewarts, and the Inneses, is situated on an isolated peak of rock in the valley of the Fiddich, near the point where it is joined by the Dullan, and within a mile of Dufftown.

The castle consists (Fig. 334) of a great wall of enceinte about 170 feet from north to south by 130 feet from east to west, and about 6 feet thick, with a tower-shaped buttress at the north-east angle. This enclosing wall is 28 feet high to the top of the parapet, and is probably the most ancient part of the buildings. Its size and massive strength remind one of the early castles of Kinclaven and Castle Roy. About 20 feet beyond the north wall, and extending round the sides, are the remains of a great ditch about 30 feet wide, which may perhaps indicate the defences of an earlier and more primitive fortress even before the days of the Comyns. Along the north wall there are some vaulted cellars, over which there appear to have been large upper rooms.

The portions of the castle most recently occupied extend along the south front (Fig. 335). The western portion is of rough work like the wall of enceinte, and is evidently the oldest part. The walls are 6 feet thick, with small openings, and the hall, which is on the first floor, has a high pointed barrel vault (see First Floor Plan, Fig. 334). The ground floor of the western portion was evidently partly occupied as the bake-house, from the ovens which still exist in the west wall, and also partly as a cellar, provided with the usual private stair from the hall above. The kitchen and offices were along the west wall, where the great kitchen chimney still remains. The eastern part of the building, including the two stair turrets and the south-east angle tower, have been rebuilt in the sixteenth century. The coat-of-arms over the door of the central stair turret (see sketch, Fig. 334) combines the arms of Stewart, Earl of Athol, and Forbes; while on the outer front there are the arms of the Earl of Athol, with a long scroll containing the motto of the Stewarts

of Athol, "Furth Fortuin and fil thi fatris," both of which ornaments point out this part of the building as belonging to the time of the Stewarts, Earls of Athol, dating from the middle of the fifteenth century. The entrance gateway still retains its double iron-grated gate or "yett," and in the vaulted entrance passage there are the usual stone seats. Adjoining this on the left is the guard-room.

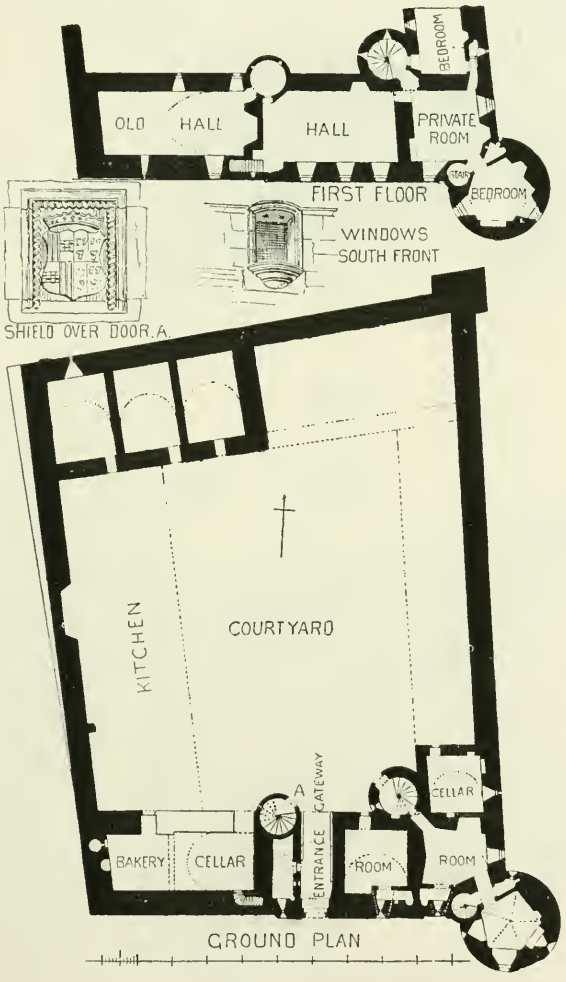


FIG. 334.—Balveny Castle. Plans.

The circular staircase to the west of the entrance leads to the two large rooms on the first floor, while the staircase in the south-east angle conducts to the private rooms as well as the hall.

The rooms on the ground floor have been used as living-rooms, each

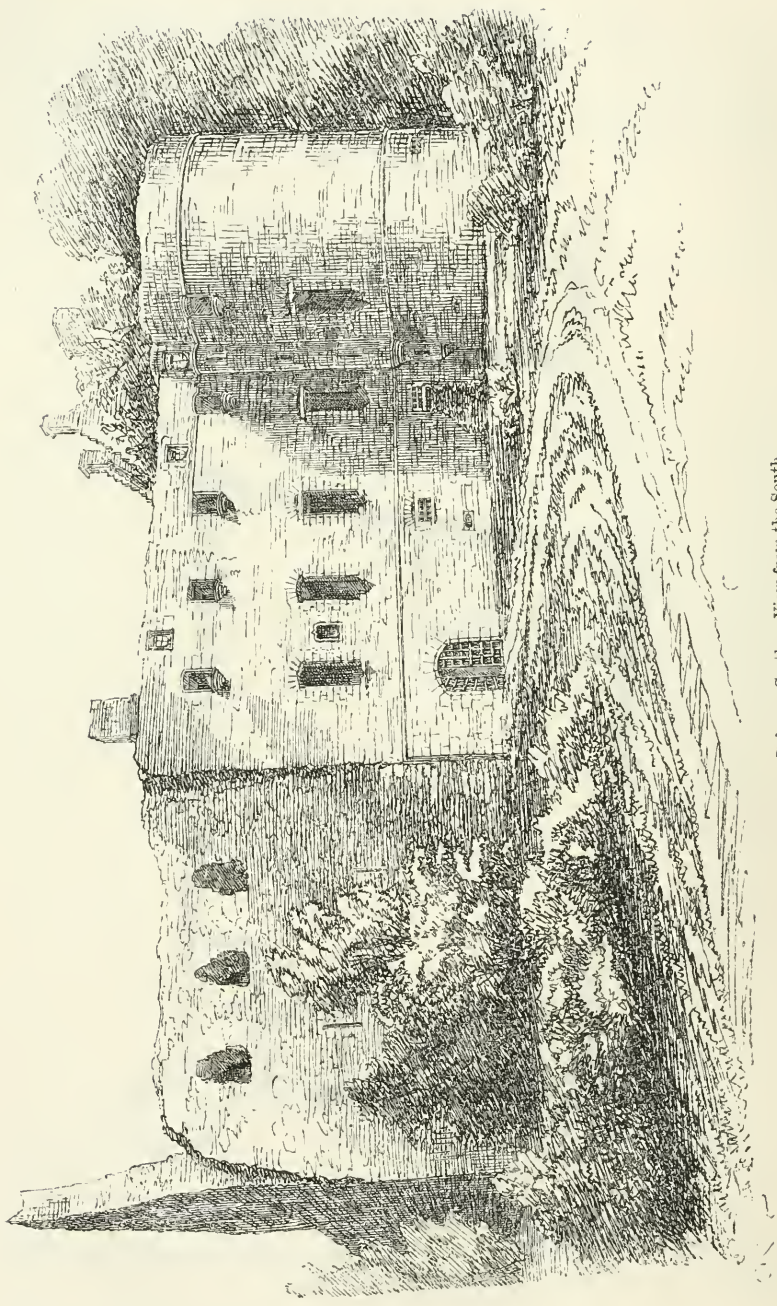


Fig. 325.—Balveny Castle. View from the South.

being supplied with a garde-robe, in which there are deeply splayed shot-holes. The garde-robes are roofed over at a low level, so that windows at a higher level may be introduced above them to light the apartments, as indicated by dotted lines on the plan. The great round tower at the south-east angle is provided with shot-holes enfilading the side walls.

On the first floor there is at the west end the old hall, with its pointed vault, thick walls, and small windows, which has apparently been superseded by the new hall to the east, with three large windows in the outer wall. To the east of this is the private room and bedrooms, while on the upper floor there appears to have been a similar hall, which was probably the withdrawing-room, with ornamental windows (sketch, Fig. 334).

The apartments seem to have extended all round the quadrangle, but only the foundations can now be traced.

The picturesque stair turrets and other features in the view of the interior of the courtyard (Fig. 336) evidently belong to the sixteenth century.

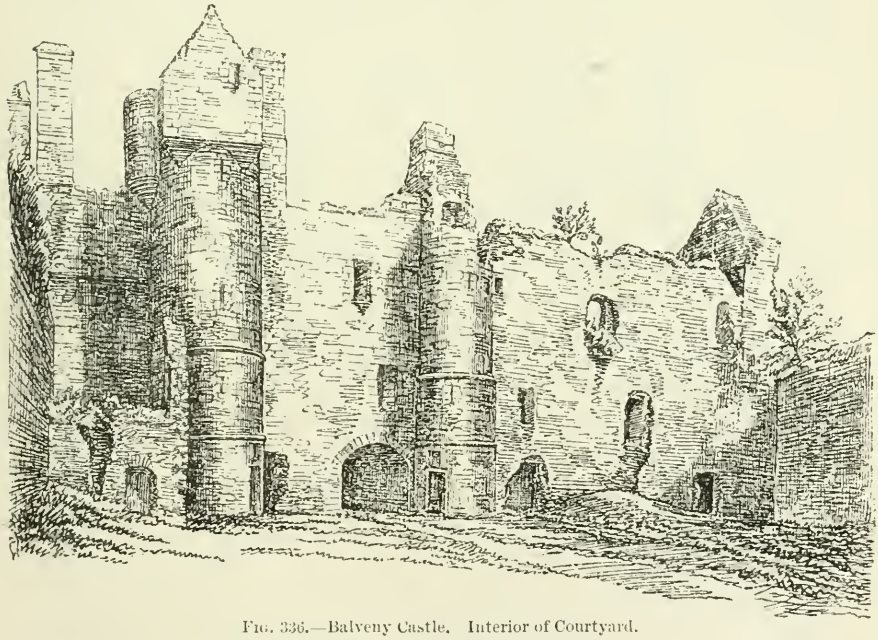


Fig. 336.—Balveny Castle. Interior of Courtyard.

John Stewart of Balveny was the son of James Stewart, the Black Knight of Lorn, and Jean, widow of James I., who married the Knight of Lorn after her first husband's death. John of Balveny was thus James II.'s half brother, and was in great favour with the King, who presented him with the lands of Balveny on his marriage to Margaret,

widow of the Earl of Douglas, and created him Earl of Athol in 1457. He was a powerful supporter of the Crown, and defeated an insurrection under the Earl of Ross, on which occasion James III. granted him the motto of "Furth Fortune and fill the fetters," which is still borne by the Earls of Athol.

John's second daughter, Katherine, married John, Lord Forbes, and it was probably by them that the new part of the Castle of Balveny was built, the coat-of-arms over the door of the central staircase containing the arms of Athol and Forbes. (See Nisbet's *Heraldry*.)

Balveny now belongs to the Earl of Fife.

The coat-of-arms over the entrance gate, and near the parapet, appears to be that of Forbes.

The windows on the upper floor, with projecting curved and moulded sills and lintels (Fig. 334), are remarkable. Mr. Billings gives an example of a similar window in the town of Elgin (now demolished).

The general aspect of the south front, with its great round tower, recalls the design of such castles as Drochil and Huntly, with their diagonally opposite towers, but as in this case the building had to be fitted to the existing courtyard, only one angle tower was required.

KILBIRNIE CASTLE, Ayrshire.

The Place of Kilbirnie has a pleasant situation on the southern slope of the Glengarnock Hills, in North Ayrshire. The castle is unfortunately in a state of great dilapidation and neglect. It is situated on high ground in the bend of a deep ravine, which protects it along the west and north. The approach from the south is by a long straight avenue of great width, with high walls on either side, enclosing large gardens, all ruinous and waste, the castle itself terminating the view.

The buildings are of two distinct periods. The original part is the keep (Fig. 337) at the north-west corner, measuring 42 feet by 32 feet 7 inches, with walls varying from 7 feet to 8 feet in thickness. It is four stories high, and contains two vaulted floors (section, Fig. 337). The entrance is on the ground floor by a round arched door at the north-east angle, leading to the basement, the vault of which is 14 feet 6 inches high. From the passage at the entrance door a newel stair leads in the thickness of the wall to a narrow passage in the north wall, which gives access by a door to the upper floor or entresol of the basement (see Plan), and to a passage in the wall, at the end of which is a hatchway 18 inches square, which forms the entrance to a dark dungeon in the north-west angle of the keep. The newel stair is continued to the hall floor and the upper floors. The corner containing the stair is now quite ruinous, and the hall can only be reached by scrambling over the fallen masonry. The hall measures 28 feet by 19 feet 6 inches, and is 21 feet 6 inches high

to the top of the arch. It is lighted by three ordinary windows (that in the south wall having by mistake been omitted in plan, but it is shown on the sketch, Fig. 338) and by a window high up in the north wall. In this wall there is a small garde-robe over the passage just described as leading to the dungeon, and a ruined fireplace in the west wall.

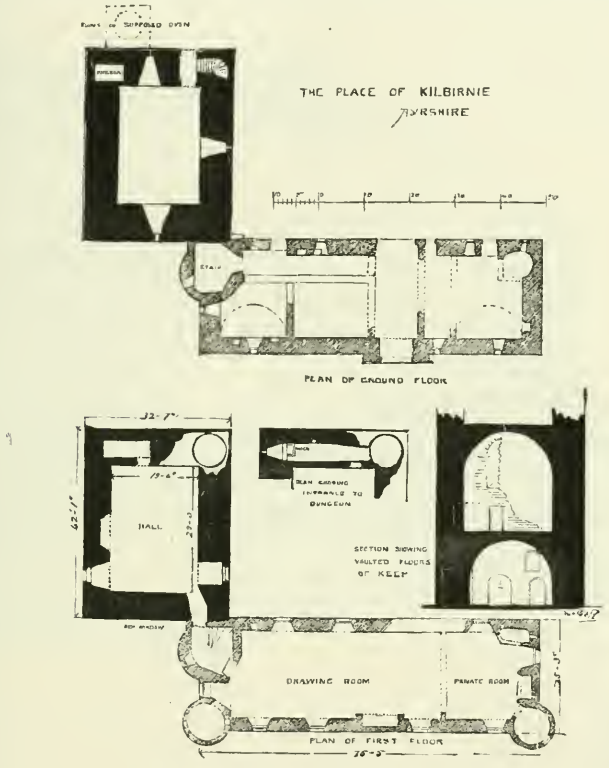


Fig. 337.—Kilbirnie Castle. Plans and Section.

The addition to the castle is a fine specimen of our seventeenth-century architecture; it is oblong on plan, measuring 74 feet 4 inches by 25 feet 3 inches, with a quaint circular staircase adjoining the old keep (Fig. 338), between which and the modern building there is a communication at the stair landing on the first floor. The old hall may thus have been retained as the dining-room, while the large room in the new building was the drawing-room of the extended castle. At the two corners of the south front (Fig. 339) there are large turrets supported on deep corbelling, ornamented with the dog-tooth ornament, the revival of which is characteristic of this late period. The number of the members and the nearness of the corbelling to the ground are also signs of a late date. These turrets are large enough to form little retiring-rooms.

The entrance doorway, 7 feet wide, is contained in a projecting porch (Fig. 339) in the south front. This is rather an unusual feature of a

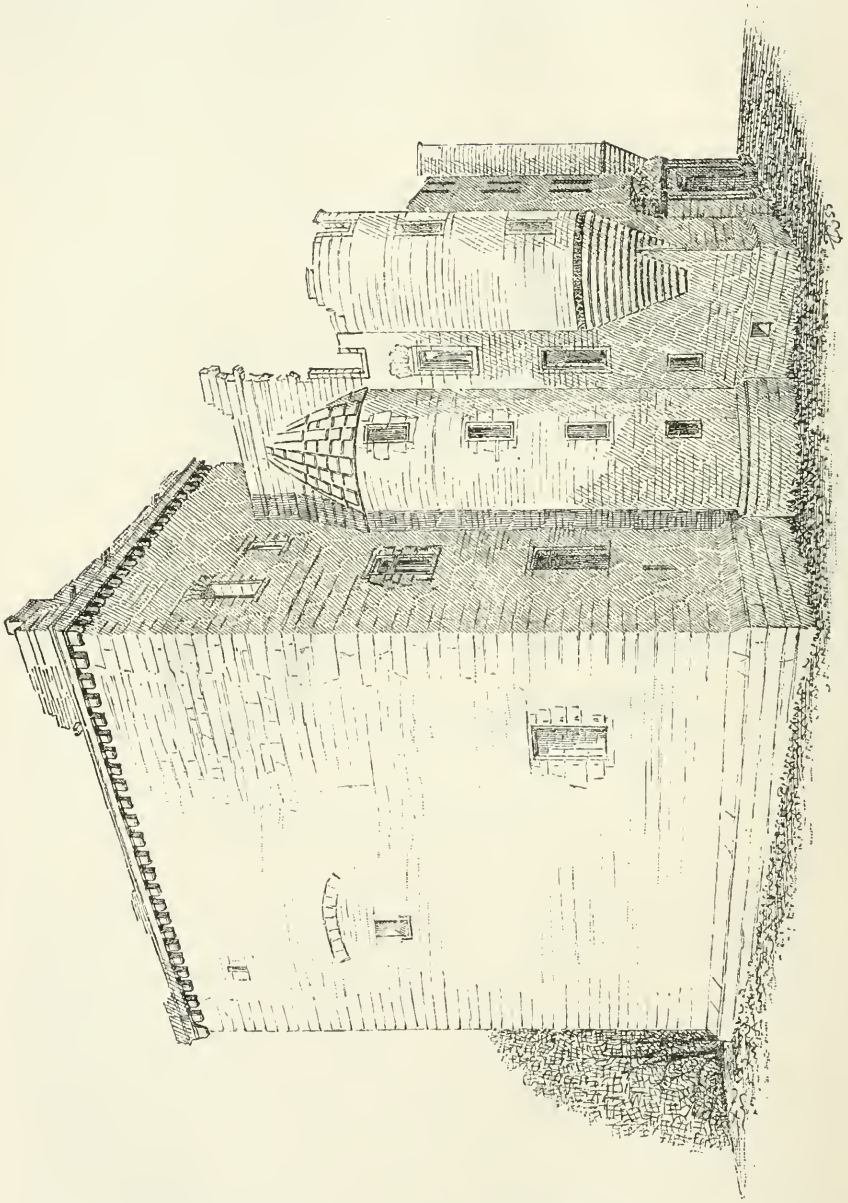


Fig. 338.—Kilbirnie Castle. View from the South-West.

Scottish mansion; indeed, we can only recall two other porches of this type—one at Stobhall, and another in the small mansion of Cardarroch,

near Lenzie. There is also a porch at Rosyth, but of a somewhat different character. Entrance doorways in projecting towers containing the staircase are of frequent occurrence, but this may be regarded as an early specimen in embryo of the modern porch, and distinct from the open pillared porch, such as that of Argyll's Lodging in Stirling. The passage from the porch continued right through the house and into the courtyard beyond. The basement (now in a state of great ruin) has been vaulted. The position of the kitchen is not quite clear, but projecting from the keep on the north are the ruins of an oven and other buildings, which seem to indicate that it was situated there. The top story, with its row of dormers, is quite ruinous.

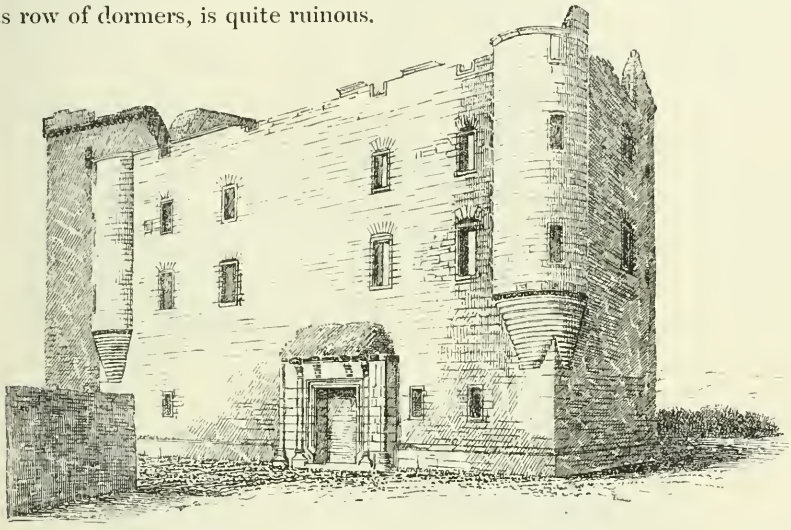


Fig. 339.—Kilbirnie Castle. View from the South-East.

In the New Statistical Account it is argued that, from the absence of gun-ports in its walls, the keep was built at the latest in the early part of the fourteenth century, "and consequently in the days of the Barclays, the most anciently recorded lords of the barony." But this is quite a fallacy. There are no gun-ports in Borthwick keep, and we know that it was built about the middle of the fifteenth century, and this tower is, we are inclined to think, even of a later date than Borthwick.

From the admirable County History entitled *Cuninghame*, by Timothy Pont, continued by James Dobie and his son, John Shedden Dobie, we learn that the male line of the Barclays became extinct in 1470, and that a daughter of the house, marrying Malcolm Crawfurd, a scion of the Crawfurds of Loudoun, became the founders of the family long known as the Crawfurds of Kilbirnie, now represented by the Earl of Glasgow.

As far as the style of the keep permits one to judge, we think it not unlikely that it was built by Malcolm Crawfurd.

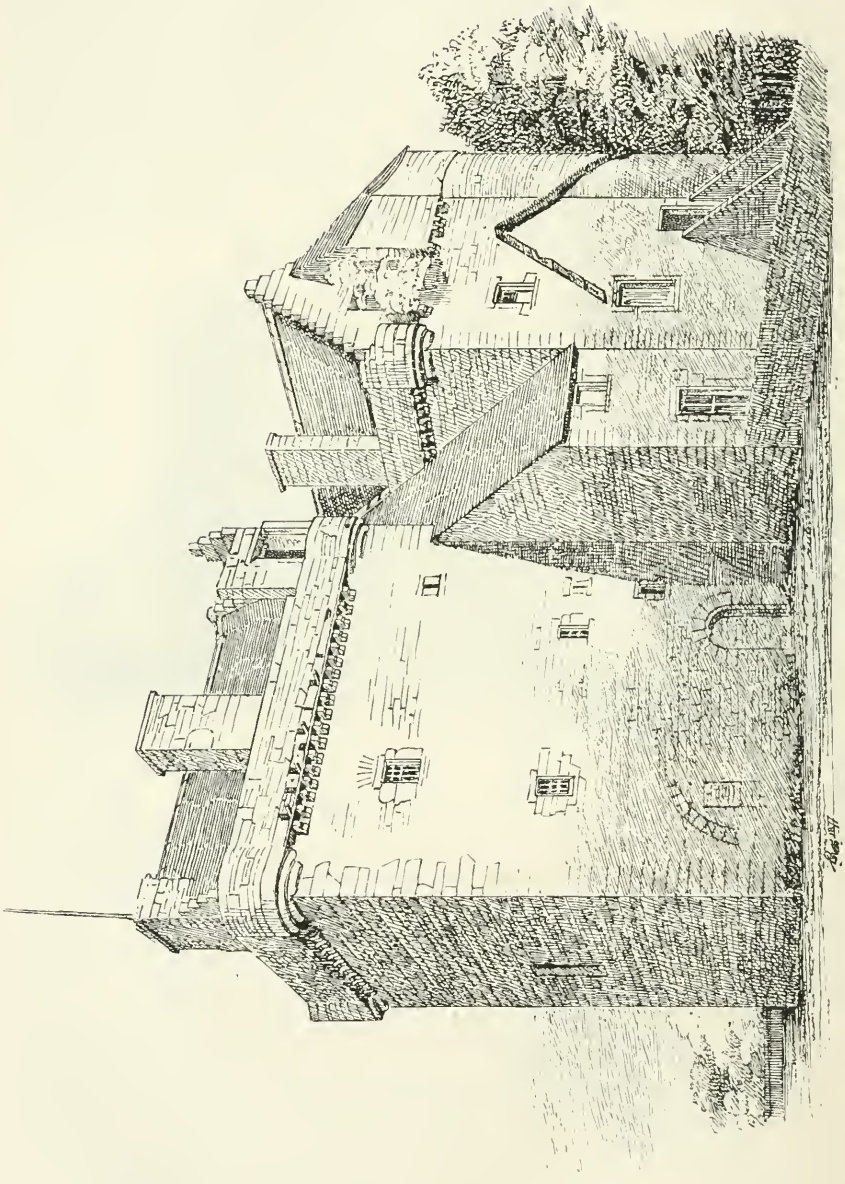


Fig. 340.—Ruthven Castle. View from the North-East.

The modern part of the edifice, we learn from the Statistical Account, was built by John Crawfurd of Kilbirnie about 1627, and its style quite corresponds with that date. Exactly 130 years afterwards, "on a calm Sunday morning, on the 1st of May, when the family were unconscious of danger, one of the servants, in going to the stables, observed smoke issuing from the roof, and gave the alarm. The Earl came down instantly, and seeing the reality of the danger, ran to the garrets, and on opening the door the flames burst forth with tremendous fury, and spread rapidly over the whole attic story." He had just time to save his sleeping infant daughter, Jean (afterwards to become Countess of Eglintoun), and, followed by the whole members of his family, to rush from his blazing home.

The house was never repaired, but it is a pity that it should be allowed to crumble gradually to ruin, when a small outlay would save it for a long time to come.

RUTHVEN CASTLE, OR HUNTINGTOWER, PERTHSHIRE.

Situated on the crest of a high bank above the river Almond, about two miles from Perth, this castle is famous as the scene of the "Raid of

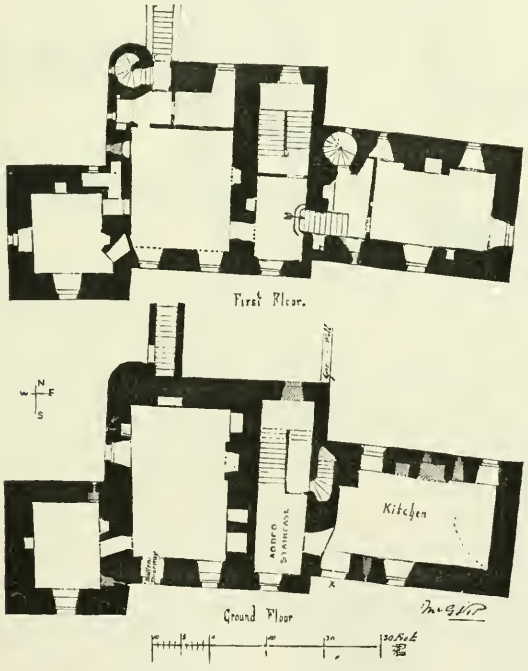


FIG. 341.—Ruthven Castle. Plan.

Ruthven." It consisted originally of a single keep of three stories (Fig. 340), built in the fifteenth century, now the eastern portion of the

building. Each floor (Figs. 341, 342) contained an apartment 27 feet by 14 feet, the ground floor being vaulted, with the entrance door and a newel stair in the north-west angle. The hall on the first floor contains a good fireplace of the fifteenth century (Fig. 343).

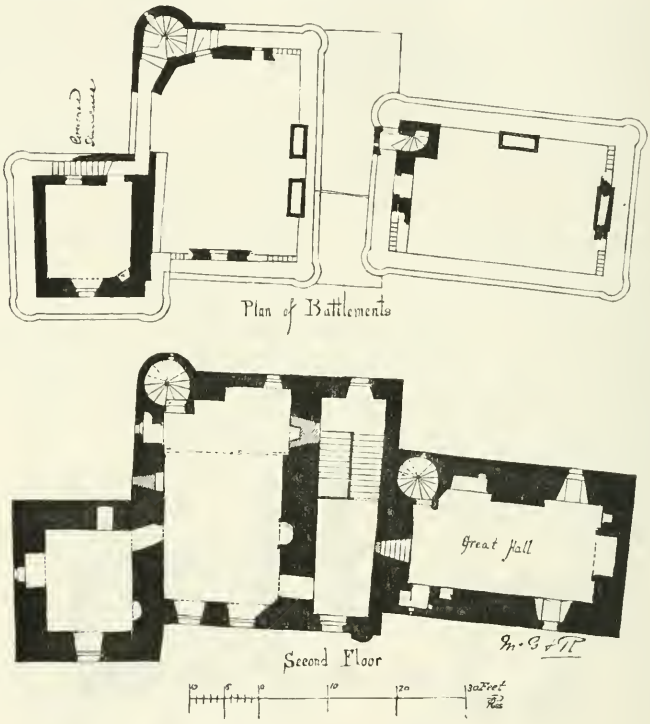


FIG. 342.—Ruthven Castle. Plan.

The accommodation in the keep being found too restricted, additional rooms were provided by building another independent house, with a square tower at the south-west angle (Fig. 344), and so situated as to leave an open space about 9 feet wide between the new and the old buildings. The western tower was entered by a door on the first floor (to which an outside stone stair has been built in recent times, Figs. 341 and 345), from which level a newel stair led to the upper parts of the building. The ground floor was either reached by a trap down from the first floor, or more likely by a door, now built up by the outside stair, as just opposite this stair, on the inside, a recess exists in the room where the entrance door probably was (see Plan).

The peculiarity here is, that the east and west towers were quite detached, and had no communication with one another, except by a moveable plank or bridge at the battlements, where a door of communi-

cation is still traceable. This idea looks like a survival of the old

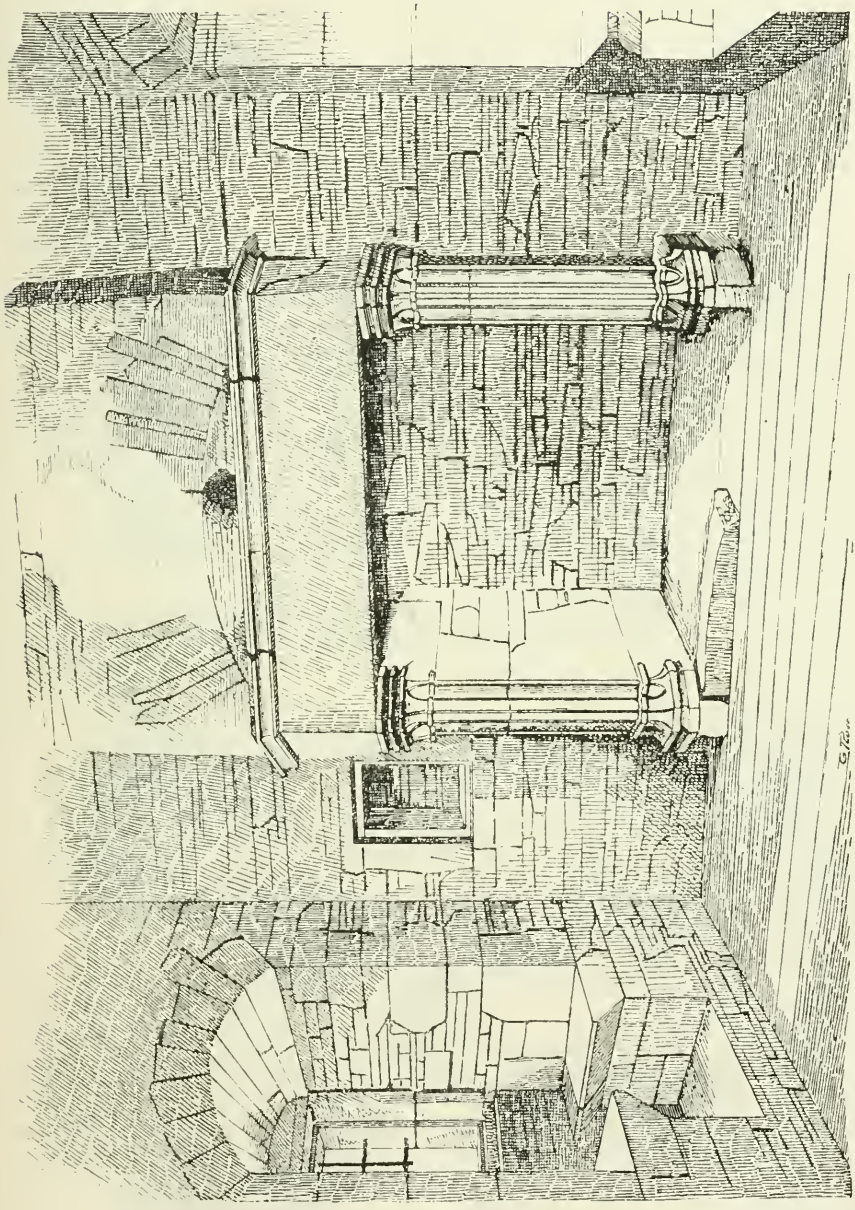


Fig. 343.—Ruthven Castle. Interior of Hall.

thirteenth-century mode of fortification, when each tower formed a separate post, and had to be besieged independently. Thus, if one of

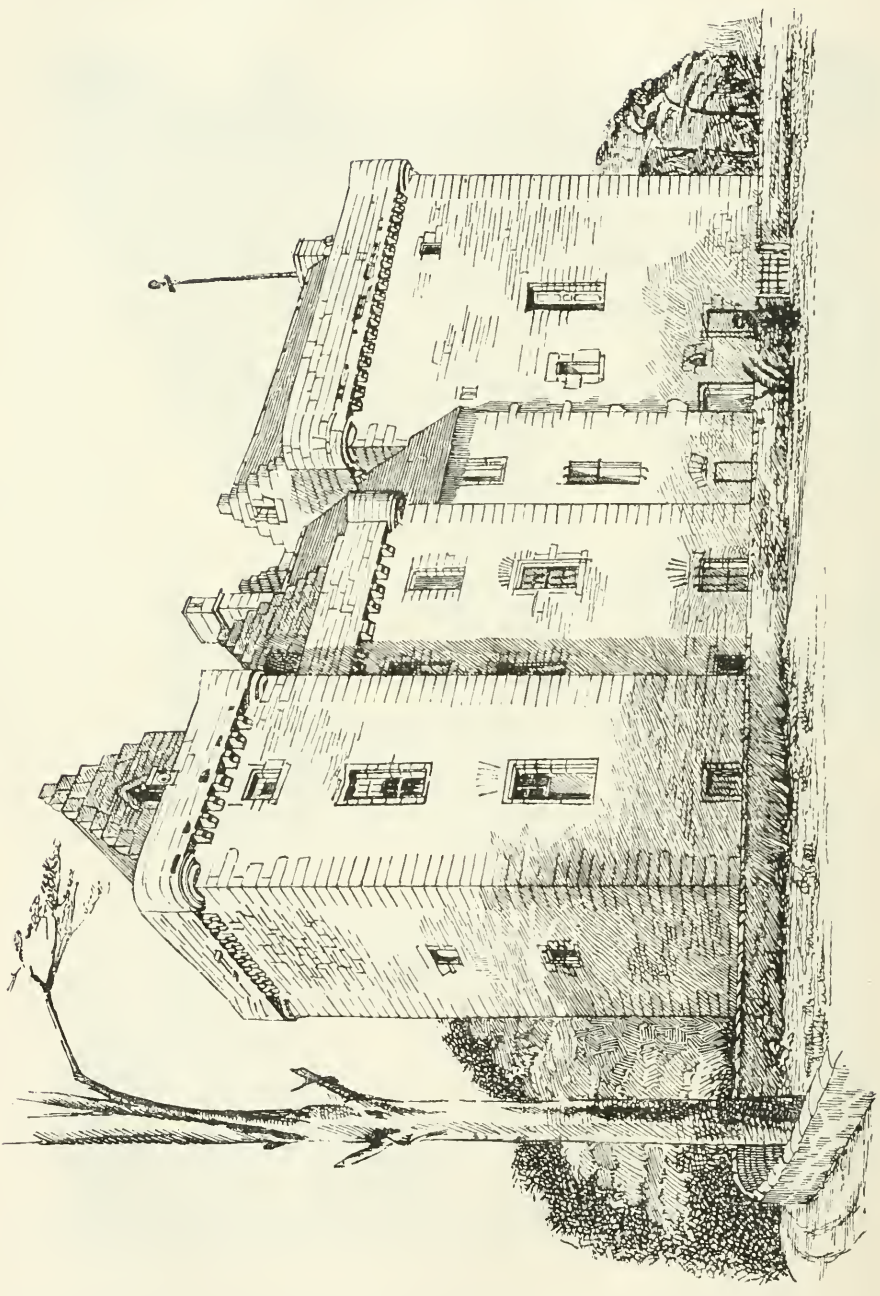


Fig. 344.—Ruthven Castle. View from the South-West.

Fig. 345.—Ruthven Castle. View from the North-West.

these towers was taken, the garrison could retire over the bridge to the other one, and the besiegers would have to commence a fresh attack.

Another peculiarity of Huntingtower is the way in which the bartizans and parapets are partly roofed in (Figs. 340 and 345), the object being to form covered passages to rooms in the roof. Here we see the roofed turret in course of formation, and the transition from the open battlements to the later arrangement, when the eaves of the roof were raised

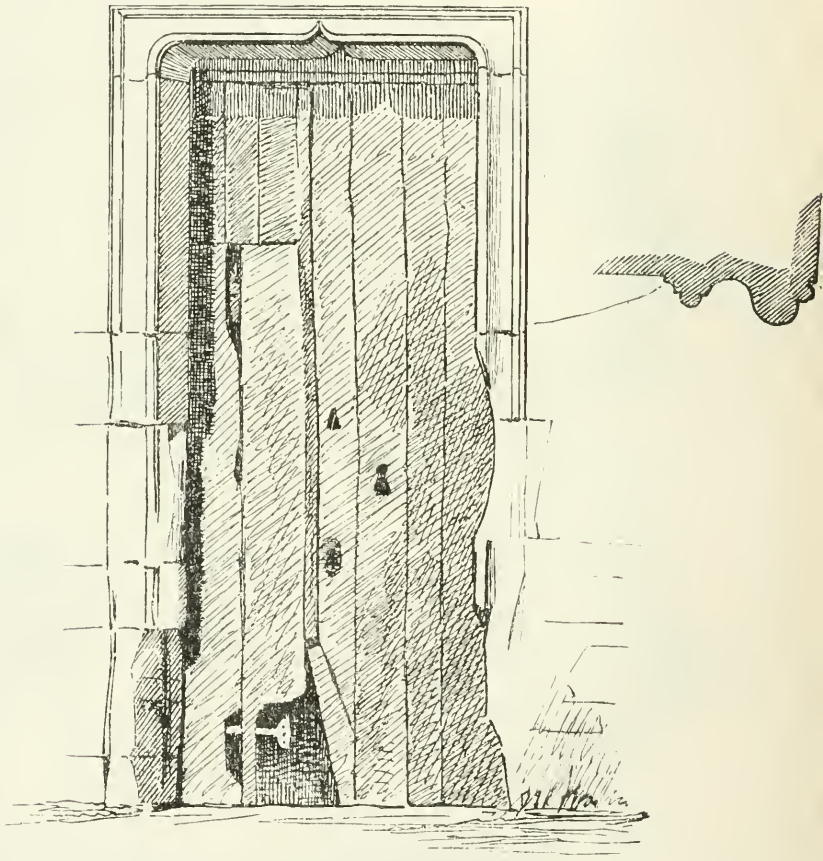


Fig. 346.—Ruthven Castle. New Entrance Doorway.

to the top of the parapet wall. The sketch (Fig. 347) shows the corbels of the parapet and bartizans of the original tower, which are characteristic of fifteenth-century work.

Towards the end of the sixteenth century, when the idea of the mansion predominated over that of the castle, the gap between the two buildings was filled up, and a square wooden staircase introduced, so as to

connect the east and west portions of the building, and form of both a good mansion-house. When the separate buildings were thus united into one house, various minor changes were effected. The old entrance to the east tower was built up, and the first flight of the turret stair was altered as shown on the plan of the ground floor. A new entrance doorway (Fig. 346) was at the same time slapped through the south front at X on plan.

Most of the panelling and plaster-work of that period still remain.

The first Lord Ruthven was created in 1488. The second tower may probably have been erected by him. Patrick, the third Lord Ruthven (1520-66), was a chief actor in the murder of Rizzio, and his son William was created Earl of Gowrie in 1581. The union of the two towers by building up the space between them was probably done about that time. In 1582 the famous "Raid of Ruthven," as above mentioned, was carried out here, when the Earl of Gowrie kidnapped the boy-King James VI., for which offence he was beheaded in 1584.

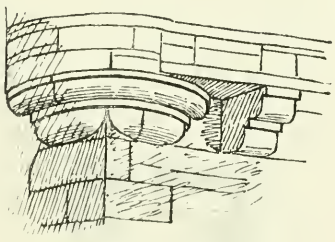


Fig. 347.—Ruthven Castle. Corbels at Parapet.

THE DEAN CASTLE, Kilmarnock.

We have here another example of the extension of a castle by the erection of buildings within the wall of enceinte, but detached from the keep.

The latter (Fig. 348) is of the ordinary quadrilateral form, and has all the characteristics of the early part of the fifteenth century, but there is no record of the date of its erection. The extensive additions seem to have been built after the middle of the same century, when the Boyd family, to whom the castle then belonged, had attained their great power and influence.

Lord Boyd was raised to the peerage by James II., and his brother, Sir Alexander Boyd, was appointed instructor in chivalry to the young James III. In 1466 the Boyds got possession of the King's person, and Lord Boyd obtained the highest appointments in the State, while his eldest son was created Earl of Arran, and received in marriage the Princess Mary, sister to the King.

But their honours and power were of short duration. In 1469 the Boyds were tried and found guilty of treason. Sir Alexander was beheaded, and the Earl of Arran fled to Denmark. The Princess Mary (the sister of King James III.) is said to have been confined in Dean Castle during the lifetime of the Earl of Arran.

This keep seems to have been the earlier castle of the Boyds, and when they rose in power they probably erected the detached buildings in the courtyard. These would thus date from about 1468-9.

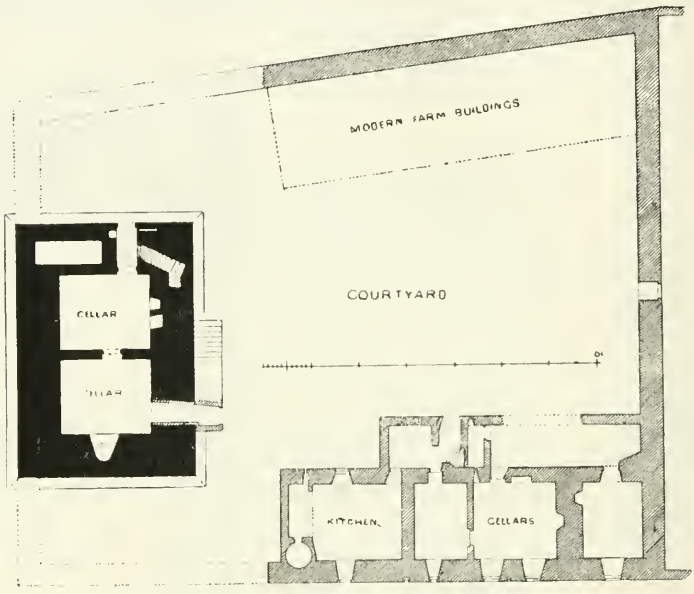


Fig. 348.—The Dean Castle. Plan of Ground Floor.

The keep (Fig. 348) is a good specimen of its period.[1] It comprises the usual vaulted basement, divided into two cellars. The basement is entered by a round arched doorway in the east gable, and a similar round arched doorway leads from the outer to the inner cellar. Mr. Galloway calls the latter apartment "the kitchen," but there are no features to justify this view. There is a fireplace in the west gable, but it has none of the characteristics of a kitchen fireplace, which in those days was always of great size, and of unmistakable appearance. This fireplace is probably an insertion, made when the upper part of the building was, as we shall see, greatly altered at a later time.

The garde-robes in the upper floors are over this point, and the flues would naturally descend in this direction. Mr. Galloway points out that there is an aperture in the outer face of the wall, opposite the fireplace on the ground floor. This may have been the aperture for cleaning the flues. One of these flues has perhaps been appropriated as a chimney when the fireplace in the basement was added. But besides this, as Mr. Galloway remarks, the staircase from the basement to the hall would have been found most inconvenient for the service from the kitchen. In

[1] This castle has been recently well illustrated by Mr. Galloway in the publications of the Ayr and Wigtown Archæological Society, vol. iii. p. 112.

short, this keep, like many others of the same date, had probably no kitchen within the building. Either the cooking was done in the hall or in an outer shed in the courtyard.

The staircase above referred to is of peculiar construction. The builder seems at first to have intended to insert a wheel staircase, running from the entrance door of the basement to the roof, and serving every floor; but after building the first eight steps, he appears to have changed his plan, and from the point then reached a crooked and irregular stair runs up in the thickness of the wall to a mural chamber on the first floor (Fig. 349), from which a very narrow passage leads to the hall. This is, in fact, an ill-constructed private stair to the cellars, such as is found in almost every castle. It is here, however, so contrived as to give access likewise from the lower entrance door to the first floor; and, to prevent its being abused, it is securely defended by the guard-room, into which it opens on the first floor, and by the narrow doors and passages which block the ingress. The base of the keep is formed by a bold slope 3 feet 6 inches high and projecting 2 feet.

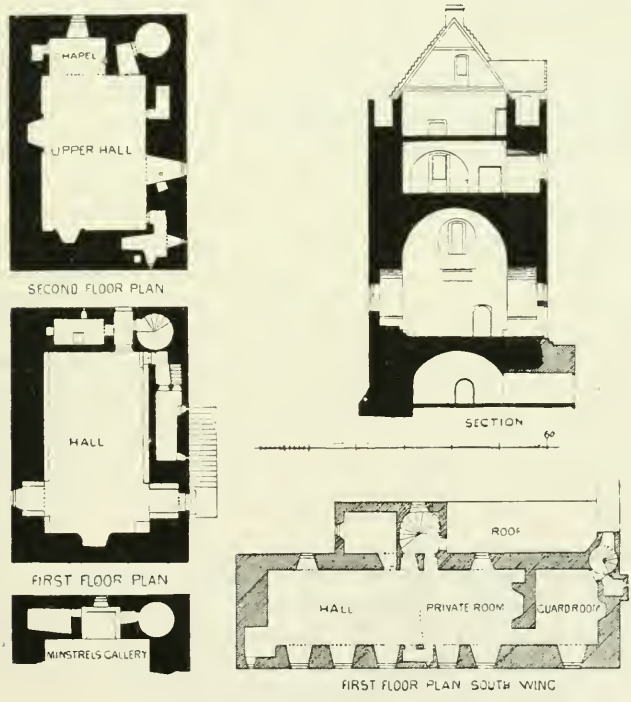


Fig. 349.—The Dean Castle. Plans and Section.

The original entrance to the hall was, as usual, on the first floor (Fig. 349), at which level the round arched doorway, although now built

up, is distinctly visible in the east gable immediately above the doorway to the basement. The present entrance to the keep is by a flight of stone steps and a doorway on the south side, but these are clearly not original. The stone stair is of a more modern style of construction, and the south doorway has evidently been broken through what was originally a window, similar to that opposite it in the north wall. The slapping out of the lower part of the entrance, which has been lowered about 2 feet 6 inches, is roughly done, and the stone seats at each side still remain, like those of the window opposite, but are now upwards of 4 feet above the floor, in which position they are only intelligible on the supposition that they were originally in the bay of a window, the floor of which was at a higher level, like that in the north wall.

Adjoining the original entrance to the keep is the newel staircase, which runs from the first floor to the roof, and gives access to the upper floors. On the north side of the narrow entrance passage there is a guard-room in the thickness of the wall, from which a man-hole gives entrance to the dungeon beneath. The latter is ventilated by means of a long narrow aperture sloping upwards in the north wall.

The hall (Fig. 349) is a spacious apartment, 38 feet long by 22 feet wide, with a semicircular vault 26 or 27 feet in height (see Section). This height seems to have been entirely within the hall, and not to have been divided into two stories, as often happened. There are no corbels to carry an intermediate floor, and there is only one window in the upper part of the eastern wall, to which we shall refer immediately. The hall has a fireplace at the west or upper end, where also the two windows in the north and south walls are situated. This fireplace is unusually narrow, and seems to have been altered, probably at the time when the one below it in the basement was inserted. Some of the mouldings have been reversed, as pointed out by Mr. Galloway, which is a clear sign of alterations. There is a stone bench or seat running along each side of the hall (as at Linlithgow), and a curious detached bench in the south-west angle. The upper window recess above referred to is, we believe, correctly described by Mr. Galloway as a musicians' gallery. It has a stone seat all round the recess (see Plan, Fig. 349), and the window itself is placed several feet above the seat, so as to allow the light to pass over the heads of the performers (see Section). This gallery is entered by a narrow passage from the main staircase, and has a small mural closet on the north side, which would be useful for the reception of musical instruments, etc. The doors entering the window bay or gallery have their sills above the stone seat, so as not to break it up and diminish the sitting room. Similar musicians' galleries exist at Doune Castle and Mearns Tower.

The floor above the hall (Plan and Section, Fig. 349) has been the upper hall or withdrawing-room. It contains an oratory or small chapel,

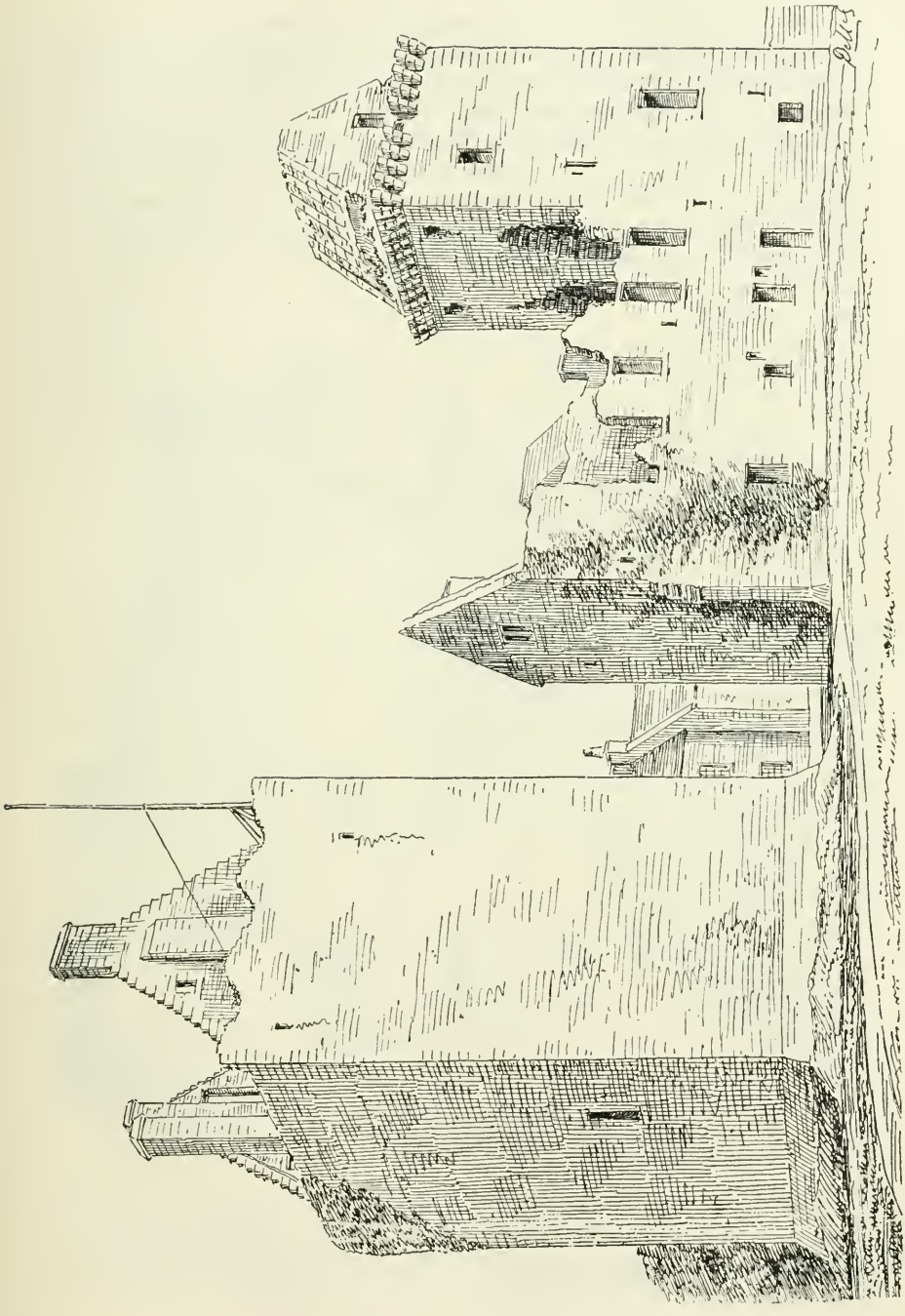


Fig. 350.—The Dean Castle. View from the North-West.

like the similar apartments at Borthwick, Doune, etc. The oratory is situated in the eastern wall, and is covered with a circular vault. It has a window to the east (now built up), a piscina, much broken, on the south side, and an ambry in the north wall. There are now two fireplaces in the upper hall, that in the west wall being apparently a late insertion. The hall is lighted by one window in the south wall, which has been enlarged, and is provided with garde-robes and closets in the walls. A large continuous corbel forms a cornice on each side of this hall to provide a rest for the timbers of the upper floor.

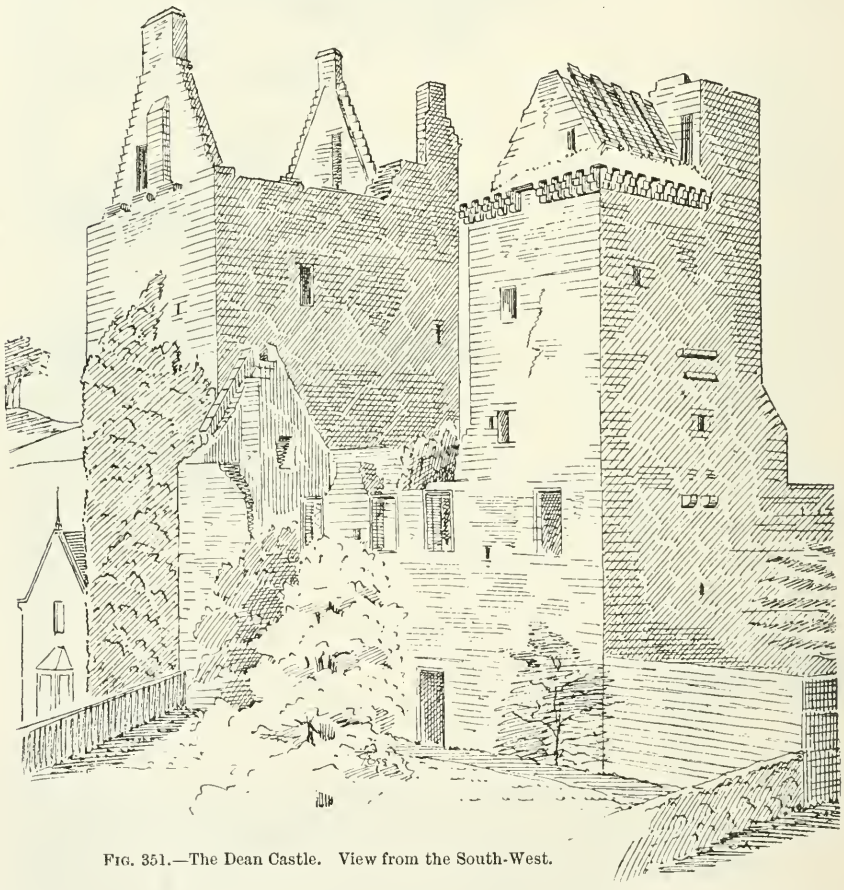


Fig. 351.—The Dean Castle. View from the South-West.

The upper part of the keep is now greatly ruined, but it is still possible to form a fair idea of the position of the battlements and the upper rooms. The parapet walk ran all round the keep (Fig. 350), the east and west gables being built on the inner edge of the thick walls.

The parapet has, like Craigmillar, no projecting corbel table, and there do not appear to have been any turrets or bartizans at the angles.

Originally there was probably only one story above the parapet walk, similar to that at Borthwick, but the upper part of the keep has been much altered in the sixteenth century, probably at the time when the other additions, about to be referred to, were made to the buildings in the courtyard.

As above mentioned, the extended buildings were almost certainly erected by Lord Boyd about 1468-9. The great tower at the south-western angle of the enceinte, with its bold corbels and stone roof (Figs. 351 and 352), are in the style of that period, while the extended accommodation provided by the new buildings corresponds with the tendency of the times. The ground floor (Fig. 348) contains a large kitchen, with spacious fireplace and oven, and various cellars and offices, all vaulted, while on the first floor (see Plan, Fig. 349) are situated a large hall, with private room adjoining, besides the apartment in the south-west tower. The latter may have been used as a guard-room, as it has a door leading out to the parapet walk of the wall of enceinte, and also to the newel staircase, which runs to the top of the tower. This tower is five stories high, and is vaulted on the top story so as to support the stone roof. The intermediate wooden floors are now all gone.

The hall was in all likelihood approached originally by an outside staircase from the courtyard, similar to that of Doune Castle, but in the middle of the seventeenth century a narrow building was erected along the eastern side of the hall containing a new entrance and staircase.

The view in the courtyard (Fig. 352) shows how this new building was applied against the old, and also the panel which contained the coat of arms and name of the builder. Grose states that in his time one could read the following inscription :—

JAMES LORD OF
KILMARNOCK
DAME CATHERINE CREYK
LADY BOYD.

The monogram of Lord James and his Dame is still distinguishable.

This Lord Kilmarnock died in 1654. In his time great alterations and additions seem to have been carried out. The windows of the outer hall were enlarged (Fig. 350), and the upper part of the keep was raised a story, with new gables and roof, and a cape house added on the top of the staircase. In 1735 the lower castle was completely destroyed by an accidental fire, and has remained in ruins ever since. The Dean is now the property of the Duke of Portland.

The massive keep of the Dean strongly recalls that of Craigmillar, while the castle, as a whole, somewhat resembles that of Doune in the

general dispositions. It has a great keep, which is here entirely detached from the other buildings, while that of Doune is only partially so. The outer buildings contain a kitchen and a banqueting-hall, and private rooms and bedrooms in the tower. Both buildings were approached by outside stairs, and both had a large courtyard enclosed with a high and massive wall, with battlemented parapet, entered from the building.

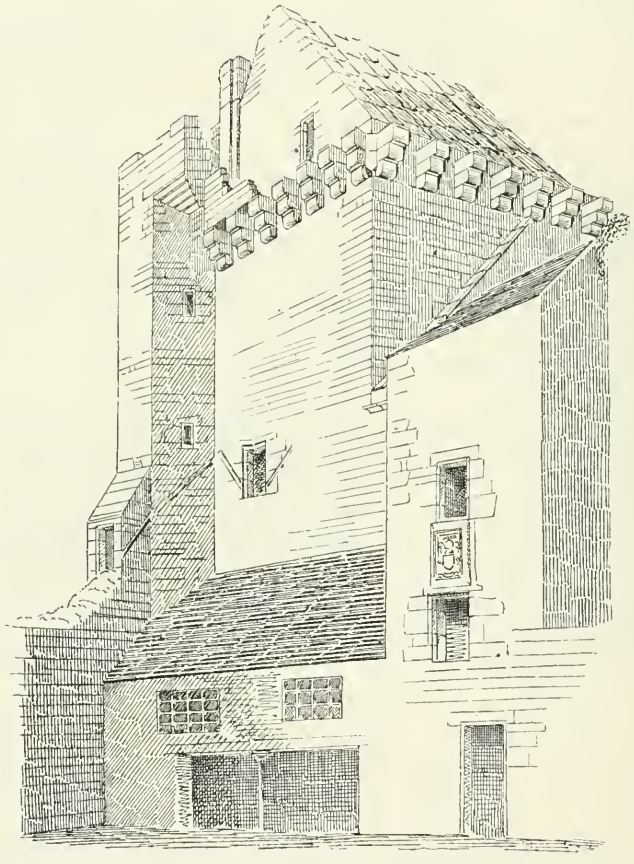


Fig. 352.—The Dean Castle. View in the Courtyard.

The south wall and part of the eastern wall of enceinte still remain at the Dean, but the rest is gone.

The situation of this castle is rather unusual. It stands on low ground near the Kilmarnock Burn, and is closely surrounded with undulating hills rising about the height of the roof of the keep. It is difficult to imagine why such a site should have been selected, unless perhaps with a view to concealment.

FALSIDE CASTLE, Haddingtonshire.

Falside Castle is situated seven miles east of Edinburgh, on high ground overlooking the plain between the castle and the Forth. The building consists of the original keep and additions on the south side. The keep (Fig. 354) measures 39 feet 4 inches by 30 feet 7 inches over the walls, and contains four stories (see Section, Fig. 354), the upper one being vaulted. The full height to the under side of the vault is 41 feet 7 inches. The entrance is by a round arched doorway in the north side of the ground floor (Fig. 354). Adjoining the entrance a straight flight of steps in the thickness of the wall leads to the first floor (Fig. 353). In the landing of this stair a trap gives access to a dungeon beneath the stair, which was ventilated in the usual way with a small round hole near the ceiling. From this landing a circular stair led to the upper floors and the roof. The floors above are lighted from each side, except the south, on which side were situated the fireplaces. The first floor seems to have been a common hall, and the floor above was the great hall or principal apartment (see Section). The latter has a mural closet sufficient for a bed, a garde-robe, and a seated window. There is a small arched niche with projecting sill, but no drain in the east end. The upper floor (Plan, Fig. 353) was no doubt used as bedrooms by the family. There seems to be no evidence of the date of erection of this keep, and from its style we cannot ascribe to it an earlier date than the latter half of the fourteenth or the fifteenth century. The family name of Fauside appears as early as the twelfth century in connection with the locality, and continues down to the seventeenth.

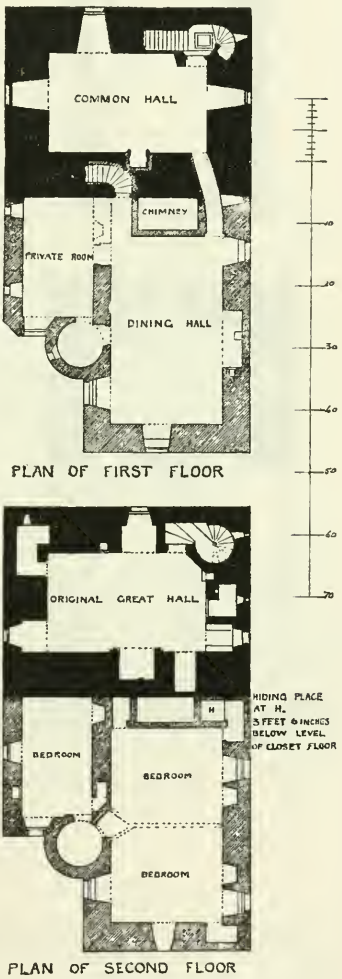


Fig. 353.—Falside Castle.
Plan of Upper Floors.

In September 1547 was fought beneath the walls of Falside the

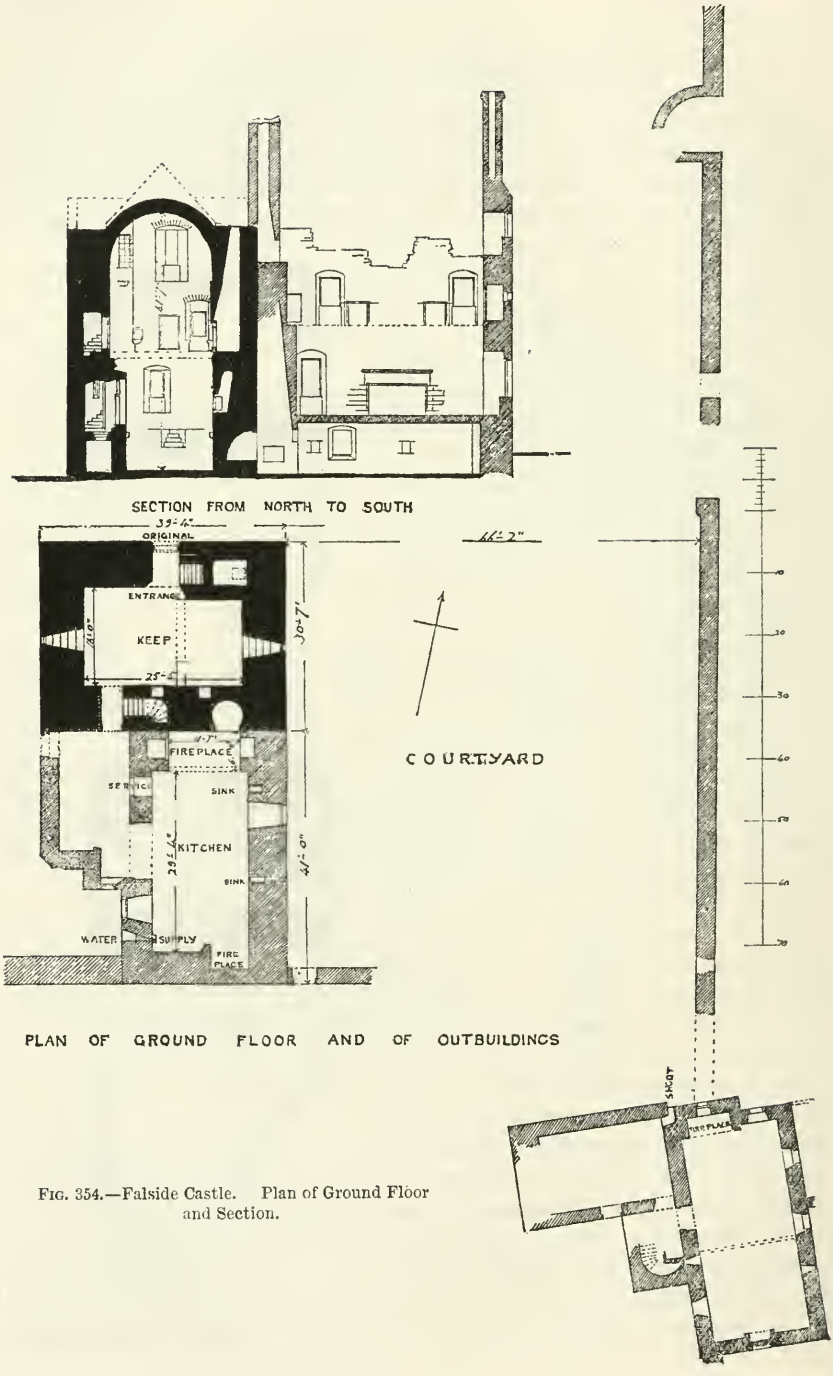


Fig. 354.—Falside Castle. Plan of Ground Floor and Section.

battle of Pinkie, between Protector Somerset and the Regent Arran. The "total destruction" of the castle is said to have been averted "through its first floor and roofs being arched over with stone." This statement would seem to imply that the additions to the castle were made by that time, as the keep is arched at the roof, and the additions are arched only on the basement floor. By these additions the castle was extended southwards 41 feet (Fig. 354), doors of communication

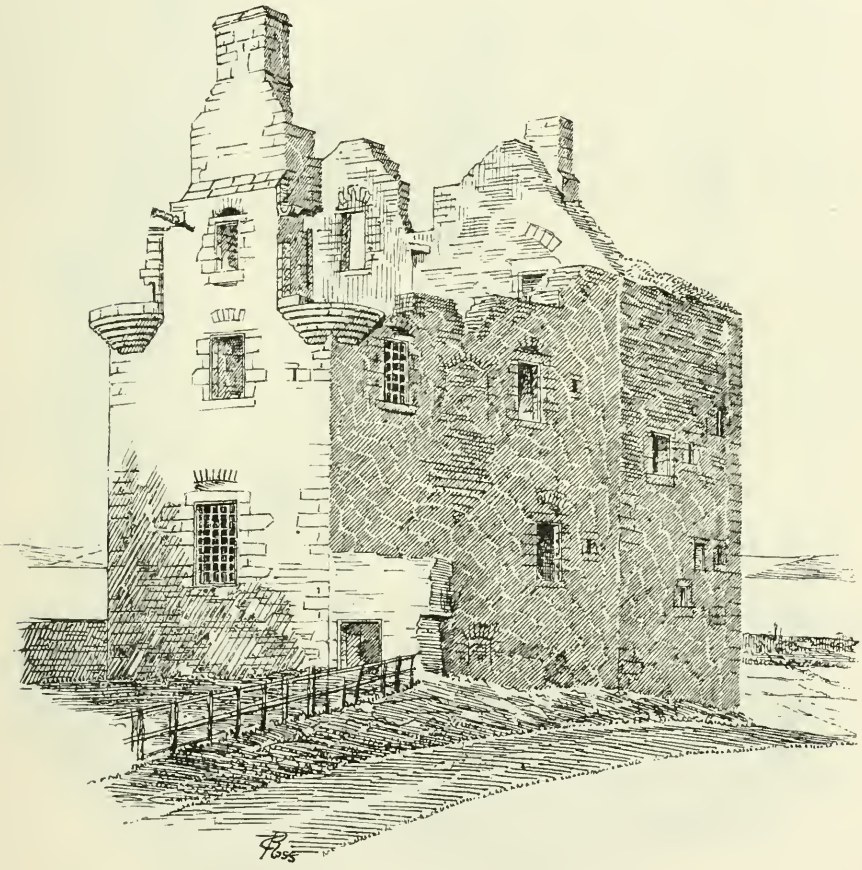


Fig. 355.—Falside Castle. View from the South-East.

between the old and new building were cut through on the two lower floors, and a space for a stair connecting the ground floor with the first floor was dug out of the south wall of the keep. A new entrance doorway was placed on the west side, having a large entrance hall, indicating a decided advance in house-planning. Entering from this hall was the kitchen, with a large fireplace at one end and a smaller one at the

other; two stone drains and a water-supply drain are also provided. On the first floor is the dining-hall, with a private room adjoining. In order to permit the spectator from the west window of the hall to see

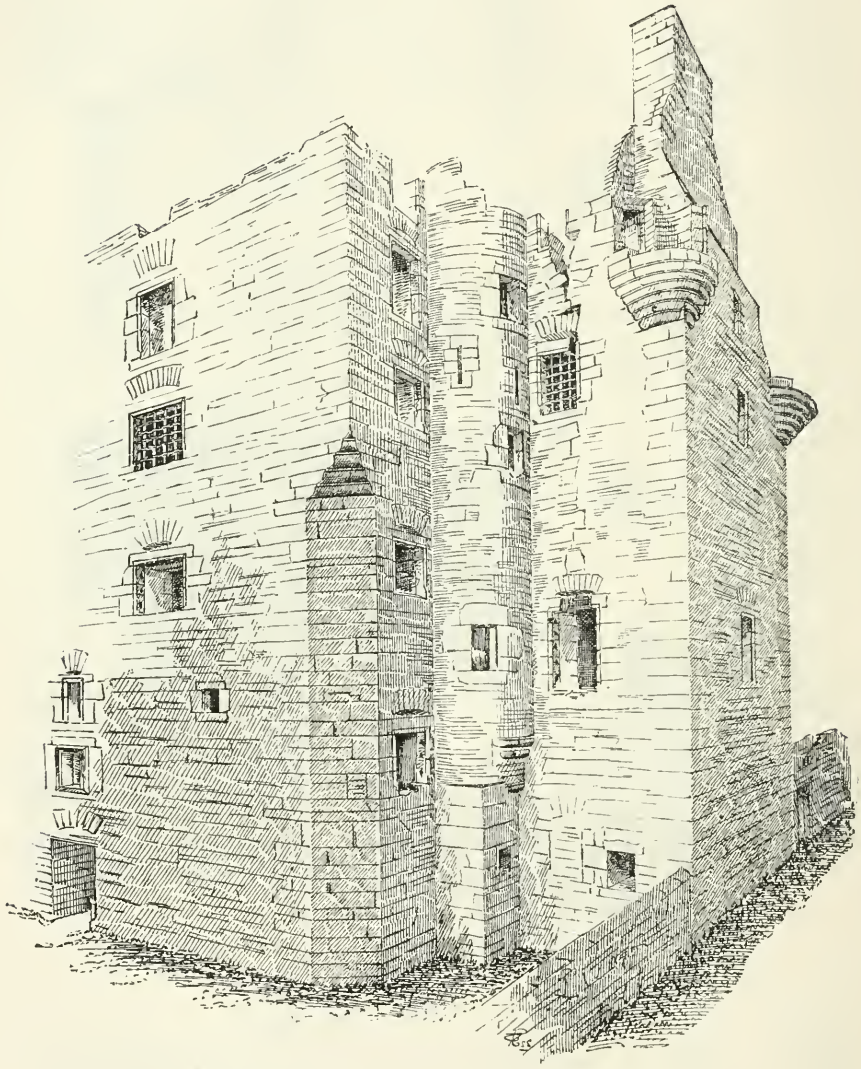


Fig. 356.—Falside Castle. View from the South-West.

as much of the country towards Edinburgh as possible, the projecting angle of the corner of the private room is splayed away, the effect of which externally with the turreted staircase (Fig. 356) is picturesque.

Fig. 355 shows the appearance of the castle from the south-east. The mode in which the additions have been made at Falside are somewhat peculiar, resembling rather an addition of modern times than of old. In the sixteenth century an old keep was generally extended by the addition of single buildings round a courtyard, but here we have an addition made so as to render the whole buildings, old and new, one solid block. The remains of walls surrounding the castle are shown on the plan of the ground floor, with a round turret open to the outside, an arrangement somewhat difficult of explanation, except on the footing that it was a late erection connected with a garden attached to the house at the south-east. That house is of good size, and is now in ruins. On one of the dormers was carved the date 1618, with the initials I·F·I·L. This dormer no longer exists. The I·F· is supposed to be John Falside, to whose memory a tablet exists at Tranent Parish Church. This house, which had offices attached, was probably occupied by dependants of the family.

HAINING, or ALMOND CASTLE, Linlithgowshire.

This is a keep of the fifteenth century, which has received extensive additions in the sixteenth century. It is situated in the higher part of Linlithgowshire, not far from Polmont, and now stands in the middle of a cultivated field.

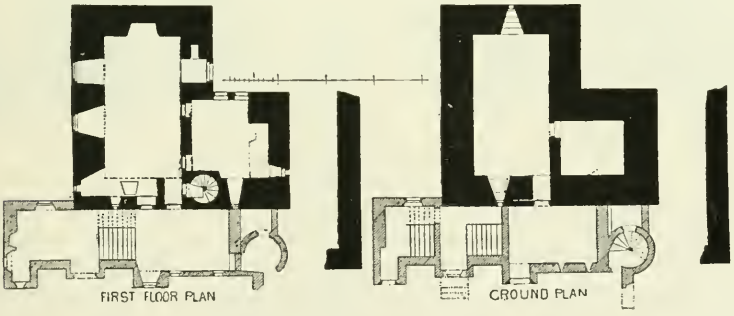


Fig. 357.—Haining Castle. Plans.

The original keep (Fig. 357) is of the L plan, but the doorway, which was on the first floor, was not placed, as usual, in the re-entering angle, but in the centre of the eastern or largest front. The newel staircase adjoining, which begins on the first floor, is however so situated as to give access to the apartments both of the main building and the wing.

There would appear to have been no access from the basement

(which is vaulted) to the first floor except by the hatch in the recess of the small window in the east wall.

The door of the keep has been defended by a projecting bartizan at the roof (Fig. 358), which still exists. There was probably originally a parapet, with bartizans at the angles, at this level, before the alterations in the sixteenth century. The roof was likely constructed of stone, similar to that of Craigmillar, as the top story has a pointed vault for the purpose of carrying it, which still remains.

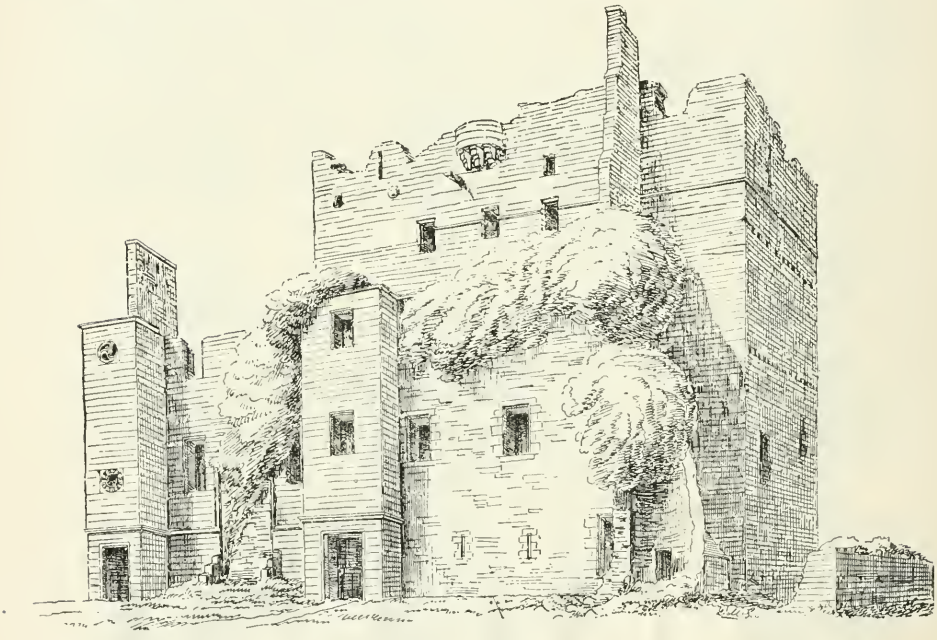


Fig. 358.—Haining Castle. View from the North-East.

The castle, which was built by the family of Crawford in the reign of James III., appears to have received additions on two separate occasions. In 1540 it was acquired by the Livingstons, who probably then added the southern portion of the addition (to the left in Fig. 358), and in 1633, when James, third son of the first Earl of Linlithgow, was created Baron Livingston of Almond, and changed the name of the castle from Haining to Almond Castle. The first of these additions is a symmetrically balanced composition, with a turret at each end and a door in each turret. There seems also to have been a large central oriel, the foundations of which still remain. The whole of this building is executed with good freestone ashlar, and the southern turret has round windows of a spurious Gothic design. This building formed a kind of "forework" to the keep, and contained a handsome staircase leading up to the doorway

on the first floor, of which a suggested restoration is shown on the plan. The interior of the original wing has had the walls hollowed out at the same time, so as to increase the size of the private room.

The remaining portions of the additions (to the right, Fig. 358) are of common rubble-work, and seem to be later. A wing has been added against the north end of the keep also, where, for the various floors, joist-holes, which are still visible, were cut in the wall of the keep.

SANQUHAR CASTLE, Dumfriesshire.

Sanquhar Castle stands on the edge of a steep bank rising up from the valley of the Nith, adjoining the village of Sanquhar, and is protected by this bank along its south and west sides, having probably had a ditch to the north. It has been a splendid building, but is now in a state of complete ruin. The castle was approached from the village along an avenue of trees, of which a few pairs still remain. At the end of the avenue was the gateway leading into the outer courtyard at the north-west corner. This gateway, of which little remains, is seventeenth-century work. Entering from the east side of this courtyard is the castle proper. Together the courtyard and castle form an oblong in plan (Fig. 359), measuring over both about 167 feet from east to west

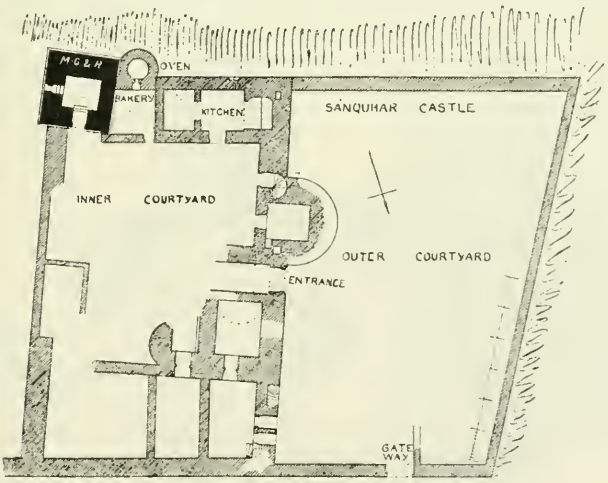


Fig. 359.—Sanquhar Castle. General Plan.

by 128 feet from north to south. The castle is entered from the outer courtyard by an arched doorway about 7 feet 6 inches wide, and was protected by a great round tower. From this door the inner court-

yard is reached through a vaulted passage, and the castle is found to consist of buildings round an oblong square, with a keep forming the original nucleus at the south-east corner. The keep measures about 23 feet square over the walls, and from 10 to 11 feet inside, and although this is a very small building, it has been well designed, with good moulded windows, a sketch of one of which is given (Fig. 360). The ground floor was vaulted, and probably one of the upper floors; but the ruin that has overtaken, not only this part, but the rest of the castle, is so complete that it can only be described in a very general way. Adjoining the keep, on the west, is the bakery, with the oven outside the wall. This oven seems to have been an insertion. The kitchen is in the south-west corner. It has had an arched fireplace about 10 feet by 9 feet, with a stone drain to the outside. In the west wall, entering from the inner court, was the wheel stair, with steps 4 feet wide, to the upper floors. The round tower between this and the entrance is nearly all away. The basement floor, which was vaulted, is at a lower level than the court-yard. It is square on plan internally, and evidently continued so to the top. The sketch (Fig. 361) shows that the two remaining walls of

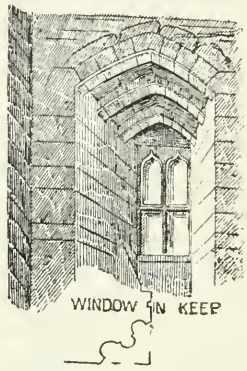


Fig. 360.—Sanquhar Castle. Window in Keep.

Fig. 361.—Sanquhar Castle. View from the South-West.

this room, as they get towards the top, are corbelled inwards on a continuous corbelling at two different heights. This diminished the size of the room, and the object of it is not clear. The same thing occurs at

other places, as at Morton Castle in the neighbourhood, in the north-west wall, where it projects towards the loch. Here, as well as at the kitchen fireplace, are flues in the walls, probably from what were garde-robes above.

The buildings to the north of the entrance gateway are nearly all swept away. There seems to have been a stair from the outer courtyard to the top of the walls, and another stair on the inside at the north-west corner can be partly traced. The whole masonry of this wall towards the outer courtyard is of the finest kind. Being in very large courses, it conveys the idea of great strength and power.

The principal apartments on the upper floors were on the west side over the entrance.

In the earliest notices of Sanquhar we find the place in possession of the Ross family, and in the reign of Robert the Bruce, Isobel, the last of this branch of the family, married a son of the Lord of Creighton, and with their descendants the barony remained till the year 1630, when it was purchased by Sir William Douglas of Drumlanrig. It was undoubtedly by some member of the Creighton family that the castle was built. The first of them died in 1360, but this is too early a date for any portion of the existing structure, the oldest part of which may be safely assigned to the following century. Sir William Douglas, the first Duke of Queensberry, who built Drumlanrig, stayed in Sanquhar Castle till his death, preferring it to the splendid structure he had himself reared, and within which he is said to have slept only one night. On his death the second Duke abandoned Sanquhar, and it then fell a prey to the depredations of the burghers, from whose rapacity the few remaining ruins have been saved in comparatively recent times.

THIRD PERIOD—CASTLES DESIGNED AS BUILDINGS SURROUNDING A COURTYARD.

In the above examples of the keep plan, as carried out and modified during the Third Period, we have noticed many special features which distinguish them from the keeps of the fourteenth century. We have also seen how many of these keeps were enlarged at later periods into castles surrounding courtyards or otherwise. But the buildings which chiefly distinguish this period are the castles designed and erected from the first on the plan of buildings surrounding a courtyard, like the contemporary castles in France and England. Nearly all the more important buildings of the period are of this class, such as the great castles of Doune and Tantallon, and the Royal palaces built by the Jameses at Edinburgh, Stirling, Linlithgow, Falkland, and Dunfermline.

While there is a rudeness in the construction of the earlier keeps and castles of this period, above described, which renders them scarcely distinguishable from those of the previous century, we have already seen, in many even of the simple keeps, and still more in the later keeps with wings, a gradual improvement both as regards accommodation and ornament. The same remark applies to the castles designed with buildings surrounding courtyards. The early types, although extended in accommodation, are somewhat rude in design, being evidently intended rather for strength than elegance. The later castles of this epoch, however, such as the Royal palaces, not only contain the numerous halls and suites of apartments common at the time in French and English mansions, but they are also built and decorated in a style almost as ornate and sumptuous as their foreign prototypes.

The castles and palaces of this period exhibit a completeness and largeness of conception not to be met with in any other period of our Scottish Architecture. In this they contrast favourably with the Ecclesiastical Architecture of the period. While the splendid cathedrals and churches of the thirteenth and fourteenth centuries were erected, the Domestic and Castellated Architecture of the country was (with a few exceptions, such as Bothwell and Kildrummie) in a very primitive and backward condition ; but now, during the fifteenth and the early part of the sixteenth century, Civil Architecture developed at the expense of the Ecclesiastical. Palaces and mansions of great extent and magnificence arose and overshadowed the small and somewhat debased collegiate churches which almost alone were erected at that time.

Some of the rich abbeys no doubt vied in the elegance of their buildings with those of the nobility, but these were rather feudal than ecclesiastical establishments.

DOUNE CASTLE, Perthshire.

Doune Castle is a striking and magnificent example of the style of castles of the beginning of the fifteenth century designed with buildings surrounding a courtyard. This castle was built by Murdoch, Duke of Albany, who was Regent in Scotland (from 1419 to 1424) during the captivity of James I. in England, and who was executed by James on his return to Scotland in 1424. Doune must therefore have been built before that date. The castle then lapsed to the Crown, and was bestowed by James IV. on his Queen, Margaret, through whom it again passed to the Stewart family, and remains at present the property of the Earl of Moray.

Doune Castle is situated close to the town of Doune, on a tongue of land lying between the rivers Teith and Ardoch at their junction, and has been further defended by the steep slope of the ground all round, and

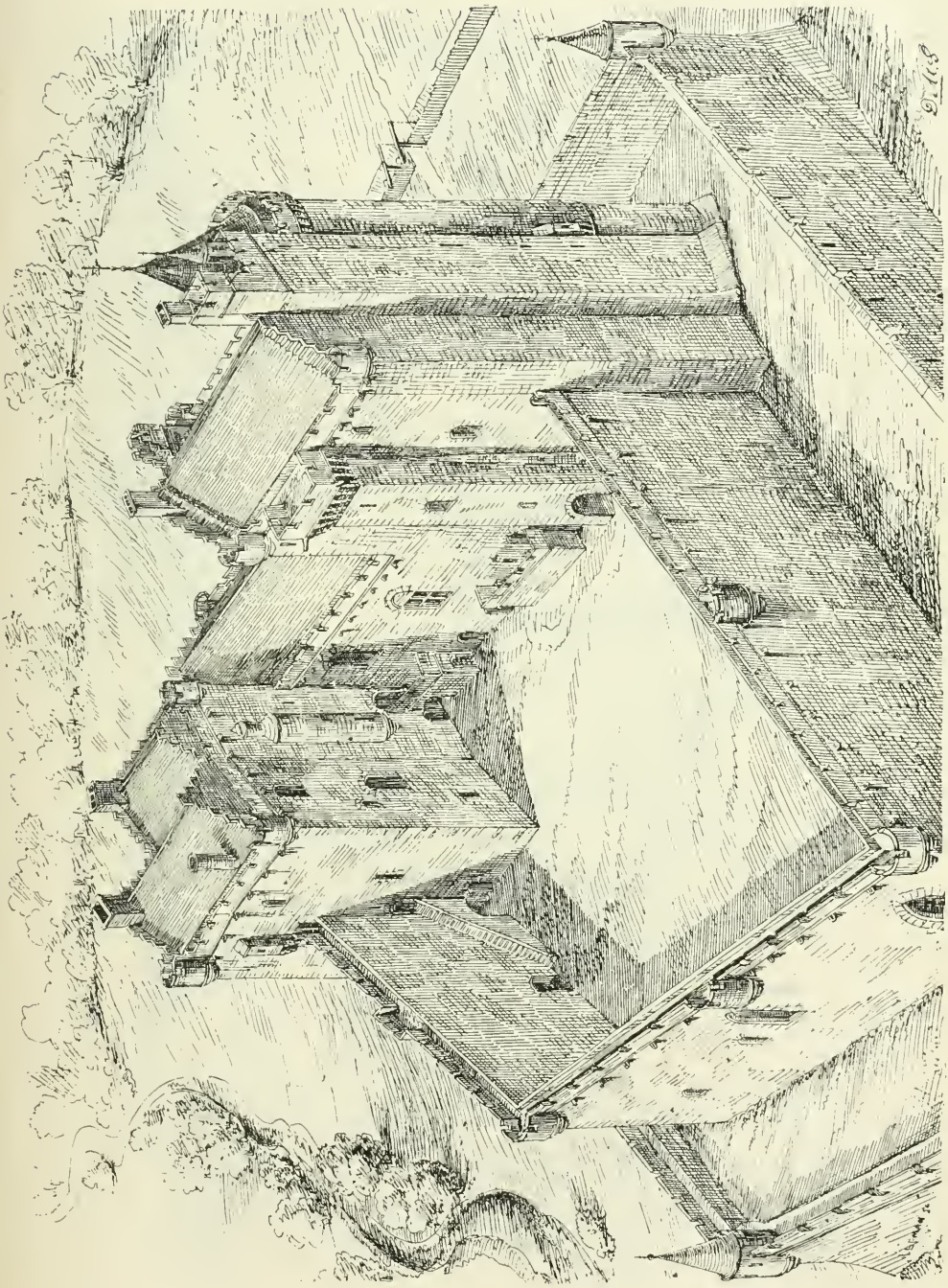


Fig. 362.—Doune Castle. View from the South-West, with some suggested Restorations.

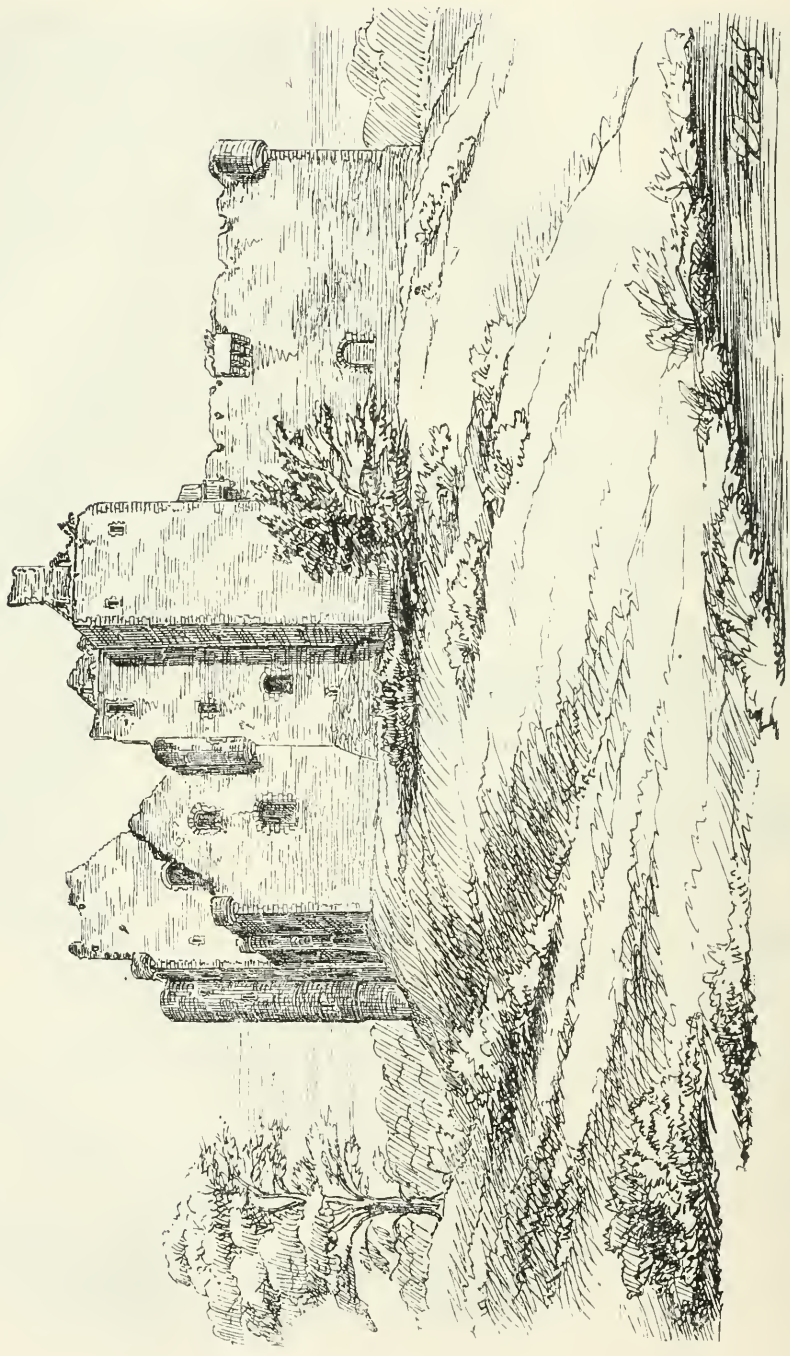


Fig. 363.—Doune Castle. View from the West.

by several ditches, which can yet be traced. There has also been an outer wall at the top of the sloping bank, the foundations of which still exist.

This castle is almost all built in one style, and is all of about the same date. Fig. 362 shows the whole in a bird's-eye view, with a few suggested restorations. The portion containing the entrance passage (Fig. 364) has probably been first built, along with the walls of enceinte. It has evidently been intended to complete the buildings all round the quadrangle. This is apparent from the tusks left in the south-west gable for the continuance of that side, and also from the large windows formed in the south wall of enceinte (Fig. 362), in preparation for large apartments intended to be erected on that side of the quadrangle.

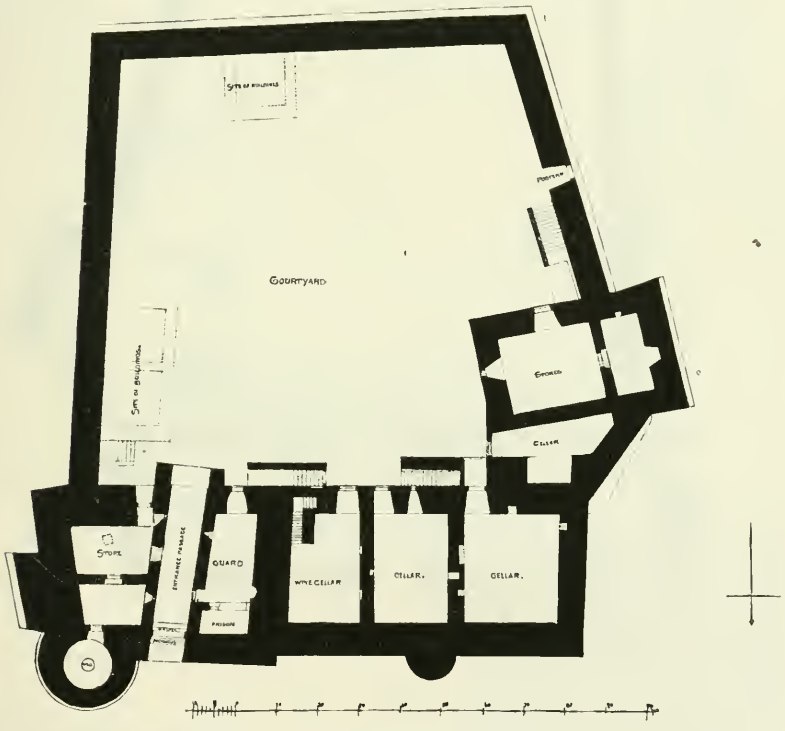


Fig. 361.—Doune Castle. Plan of Ground Floor.

The walls of enceinte are 40 feet high (section, Fig. 367), besides the parapet of about 6 feet, which has a projecting string-course, but no machicolations occur except over the postern door in the west wall (Fig. 363). The walls are however defended with open bartizans at the angles and in the centre of the curtains. The whole building (Fig. 364) measures 155 feet by 143 feet. The block over the entrance at the north-east angle is complete in itself, and would form a large castle inde-

pendently of the other portions of the edifice. It in fact constitutes an enlarged keep, without internal communication with the other buildings. This was a usual arrangement in similar castles of this period, as it was also in France and England. At Pierrefonds, for example, the keep is a large block, containing numerous apartments, and is sufficiently extensive to form an independent residence. It thus presents (as above pointed out) a striking contrast in the dispositions of its keep to that of Couci, which was erected about a century earlier, just as Doune contrasts with the Scottish keeps of the previous periods.

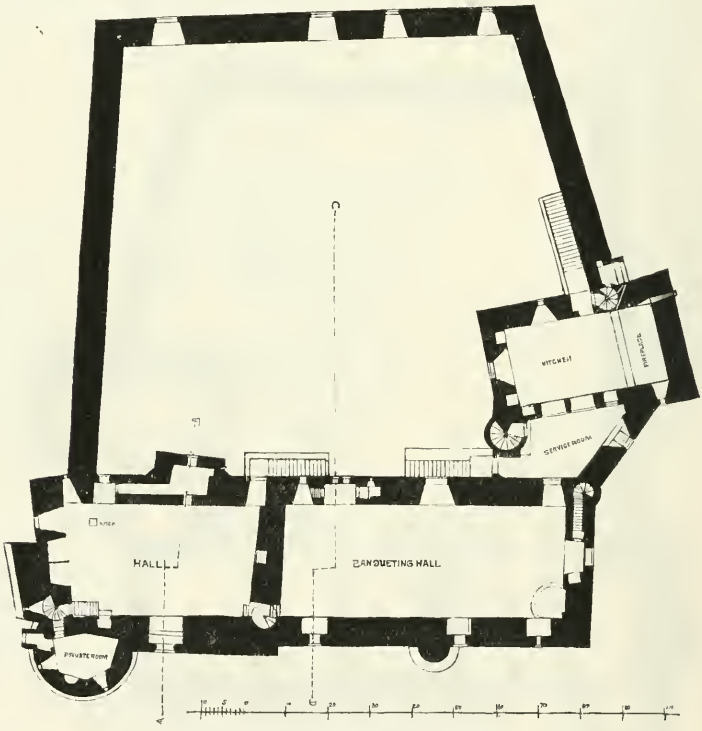


FIG. 365.—Doune Castle. Plan of First Floor.

The entrance to the quadrangle is peculiar, being by an archway which passes below the great hall. The gateway is provided with wooden doors, strong iron-grated gates, which still exist, and a portcullis, which was worked from the window recess of the hall above. The gateway is flanked by a great round tower (Fig. 366), as at Pierrefonds. In the entrance passage there is a guard-room on one side, with a small prison entering from it, and on the other side are stores and cellars, and a well in the great round tower.

On the first floor (Fig. 365) is the great hall, 44 feet by 26 feet

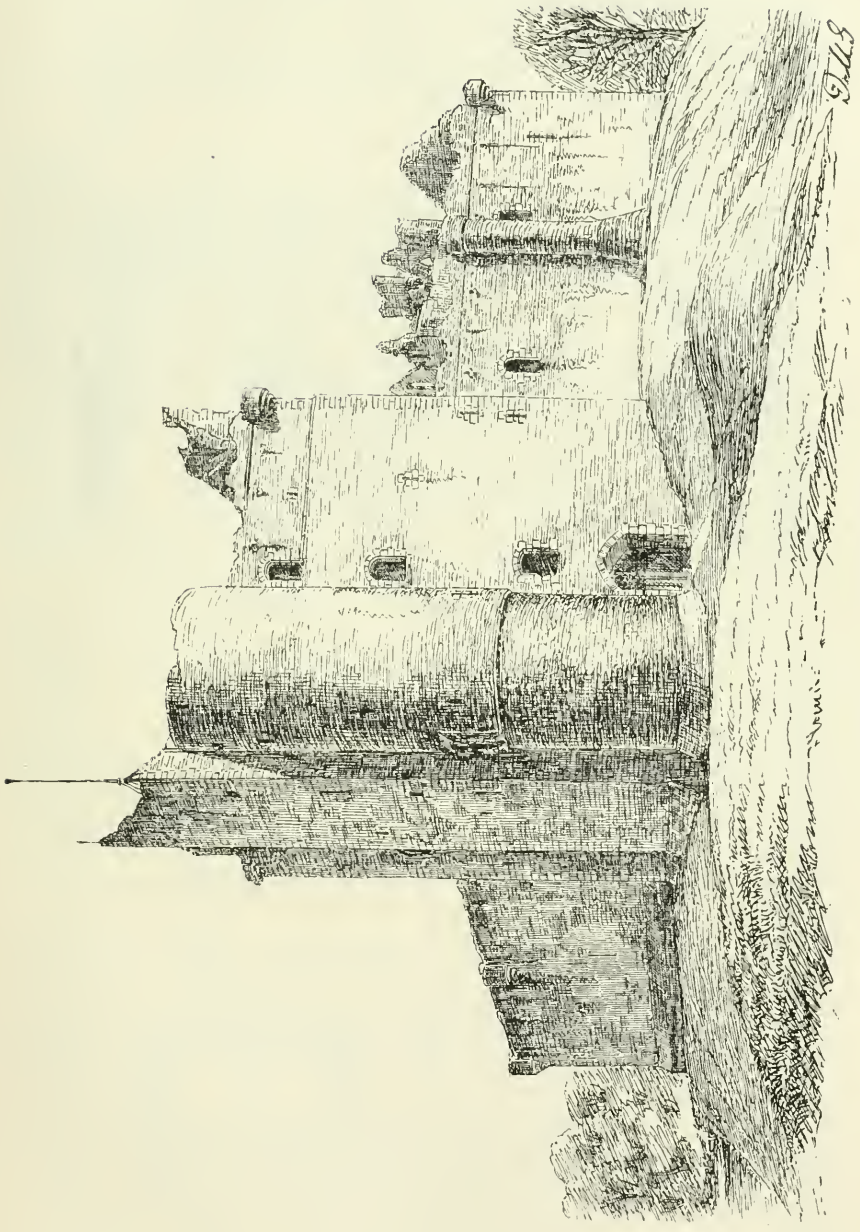


Fig. 366.—Doune Castle. View from the North-West.

6 inches, and 24 feet 6 inches high to the crown of the semicircular vault, which has apparently always formed the roof of the hall (Fig. 372). The hall is entered by an outside straight stair, the only internal communication between the basement and the hall being by an aperture in the vault (shown on the Plans) through which stores, etc., could be hoisted.

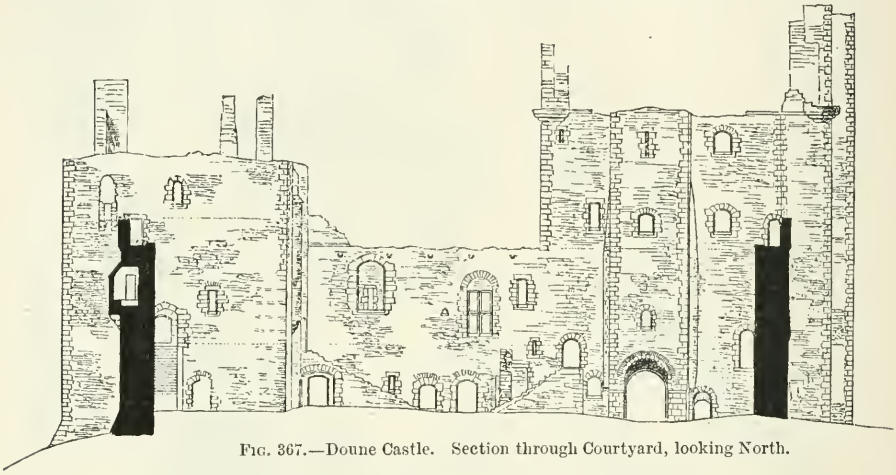


Fig. 367.—Doune Castle. Section through Courtyard, looking North.

The outside stair has been enclosed with a wall, and was guarded by a grated gate at the bottom, the recess for which when open may be seen in the main wall. The hall has a large window over the gateway, from the recess of which, as above mentioned, the portcullis was worked. It has also a fine double fireplace (Fig. 368), with jambs and lintel ornamented with shafts and mouldings. It must however be admitted that the details of these are not so good as one would expect at the above date, but the whole of the ornamental work of this castle, as of Scotch castles in general, although there are exceptions, is of an inferior character to the similar class of work in ecclesiastical edifices.

There is a private room in the tower over the inner end of the entrance archway, with a window to the hall, from which a view could be obtained of all that went on there (Fig. 365). Another room in the great tower enters from the hall, and has an aperture in the floor for drawing up water from the well-room. From the hall a staircase leads to four private rooms in the various floors of the tower, to the upper floors over the hall, and to the roof. Another newel stair at the north-west angle of the hall also leads to the upper floors and roof. There is now a communication between this part of the castle and the banqueting-hall adjoining, but this is not likely to have been the case originally. There is no other opening between the keep and the buildings adjoining it. The second floor, immediately over the hall (Fig. 369), comprised the withdrawing-room, entering from which is an oratory in the south

window recess, which has served as the chapel. The piscina, locker, etc.,

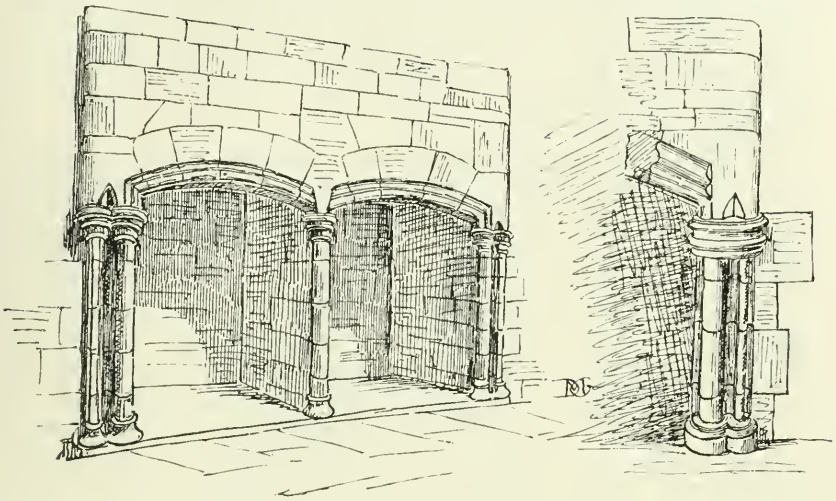


Fig. 368.—Doune Castle. Details of Fireplaces.

are still preserved. This arrangement recalls the similar plan of the chapel at Borthwick. It is thought that the large pointed windows in

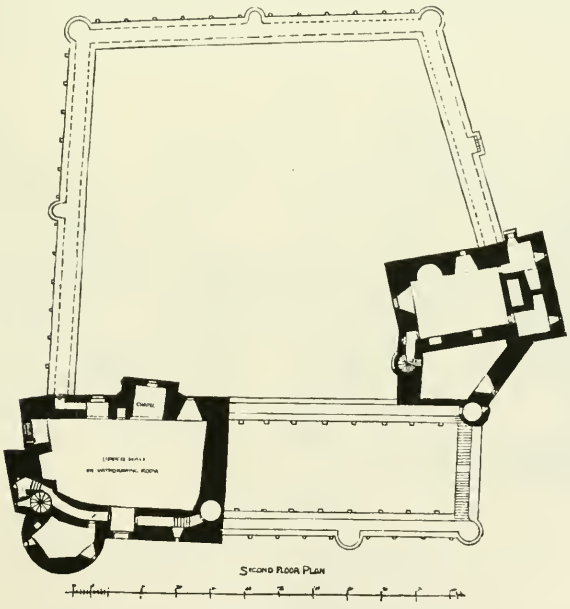


Fig. 369.—Doune Castle. Plan of Second Floor.

the south curtain (Fig. 362) indicate the intention of erecting a large

chapel there, which however was never carried out. The drawing-room is entered from both the above-mentioned staircases by passages in the thickness of the wall opening in a window recess. A similar passage in the south wall leads to the parapet walk of the enceinte (Fig. 369). The drawing-room has a good fireplace, with similar workmanship and mouldings to that of the hall.

The floor of the top story was of wood (Fig. 372), and the accommodation was similar to that on the drawing-room floor. Above this was the wooden roof. The apartments in the round tower are all vaulted, and probably it had a pointed roof, with crenellated parapet for defence. The east gable was carried up so as to form a high watch-tower, with no doubt a beacon grating (Fig. 362). The passage across the roofs from the battlements on one side to those on the other was effected by wide stairs on the top of the gable walls (Fig. 370) defended with parapets. There are round projecting bartizans at the corners, and the north-west corner over the staircase was carried up as a high turret.

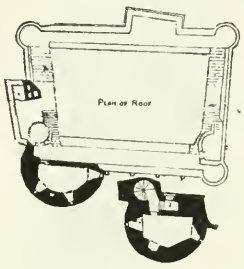


Fig. 370.—Doune Castle. Plan of Upper Rooms of Tower and Battlements.

This portion of the building (Fig. 371), as already mentioned, forms an independent residence. Adjoining it on the west is the banqueting-

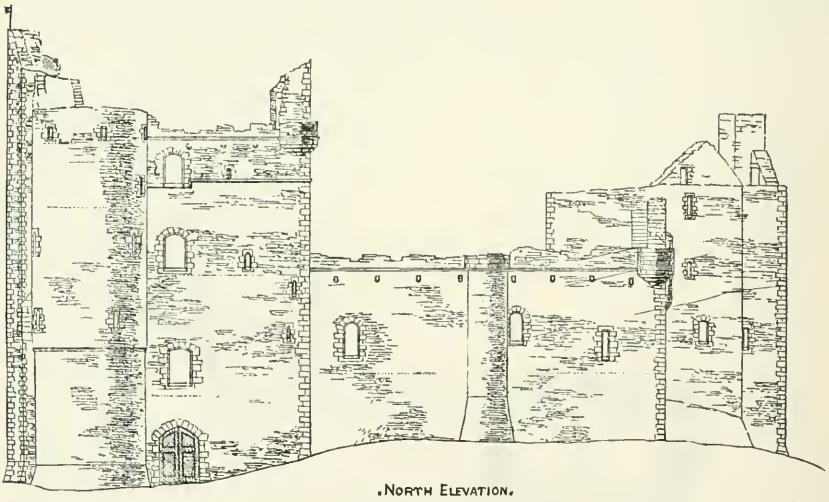


Fig. 371.—Doune Castle. Elevation of North Front.

hall, situated on the first floor (Fig. 365), with a range of cellars underneath. It is 68 feet long by 27 feet wide, and has had an ornamental

open wooden roof; the stone corbels for the principal rafters, carved with heads, still remain (Fig. 373). The "screens" were at the west end,

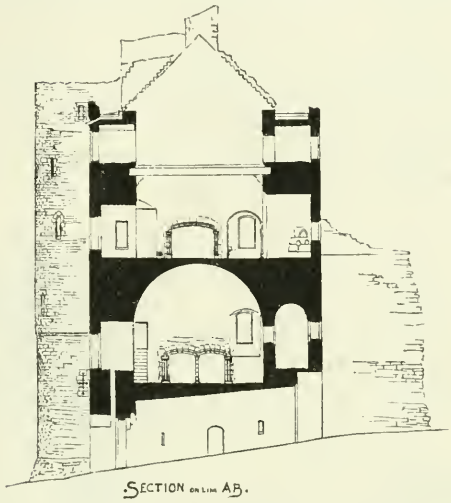


Fig. 372.—Doune Castle. Section through Hall.

where a stair from the recess of the window leads to the parapet of the roof and to the floor over the "screens," where no doubt the minstrels' gallery was situated. There is an upper window at a suitable level for lighting it.

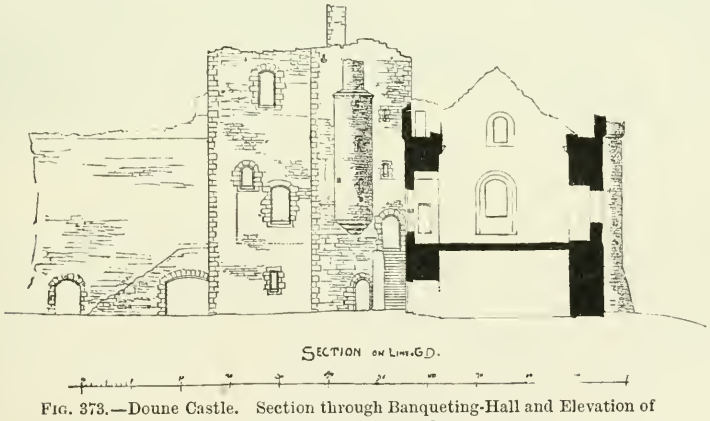


Fig. 373.—Doune Castle. Section through Banqueting-Hall and Elevation of West Side of Courtyard.

This hall was lighted with large windows to the courtyard (Fig. 367). In the recess of one of them is a garde-robe, and opposite it a stair to the wine-cellar. The windows on the north side are also of good size (Fig. 371); the one to the screens, however, is smaller than the others. The outer wall is here strengthened with a solid semicircular tower.

The banqueting-hall is entered by a separate straight outside stair, which was enclosed with a wall like that to the common hall (Fig. 373). Such separate outside stairs to different parts of castles were a usual arrangement in castles surrounding a courtyard, and were also quite common in the French and English examples. This stair leads to an entrance hall, which was also used as a service room, having a door to the banqueting-hall on one side, and to the kitchen on the other. The kitchen further communicates with this entrance by two service openings in the wall, with elliptic arches (Fig. 374). This unusual form of arch is

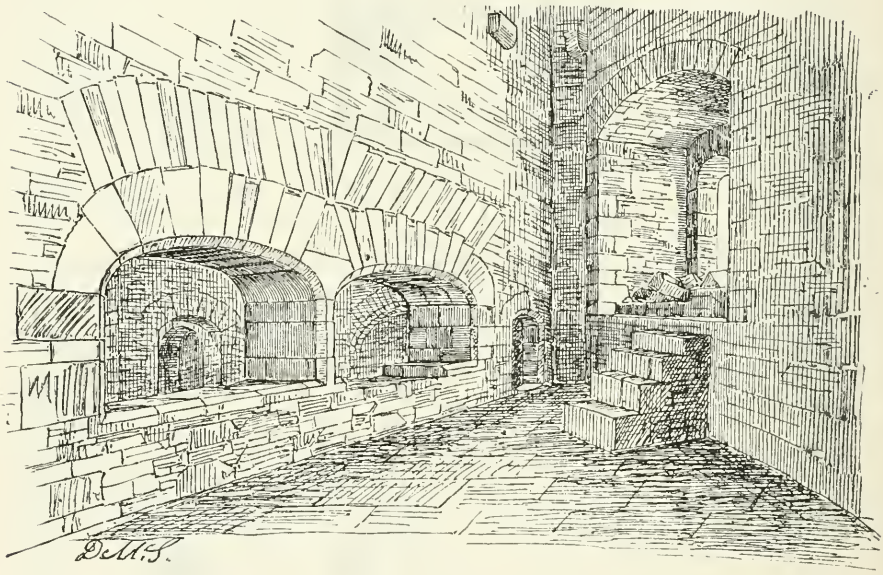


Fig. 374.—Doune Castle. View in Service Room.

much employed in every part of this castle, from the basement to the top floor. The kitchen is vaulted, and there are openings in the vaults over the windows, probably intended for ventilation. There is one large opening into the kitchen chimney at the apex of the vault, which is certainly provided for that purpose. Another straight outside stair leads from near the postern door in the west wall to the kitchen (Fig. 373), and from the top of this stair a newel stair leads to the parapet of the west enceinte. Another newel stair, corbelled out near the entrance to the banqueting-hall, leads to a series of rooms over the entrance lobby and kitchen. The apartment over the kitchen (Fig. 369) seems to have been a principal guest-chamber, having a handsome fireplace (one jamb of which is shown in Fig. 368) and a large window. Two small rooms (one with a garde-robe) enter off it.

Probably the idea was to limit strangers and guests to this part of the castle, the isolated residence or keep over the entrance passage being reserved for the owner and his family only.

TANTALLON CASTLE, Haddingtonshire.

The castle of Tantallon is another magnificent specimen of the edifices erected about the end of the fourteenth or the beginning of the fifteenth century, in the form of a quadrangle. This castle, like Doune, belonged to Murdoch, Duke of Albany. Here also, as there, the entrance passes under a large building, which formed an independent castle or keep.

The fortress of Tantallon occupies a bold promontory at the mouth of the Firth of Forth, and about three miles eastwards from North Berwick. Being sufficiently protected on three sides by the nature of its site (Fig. 375), which consists of a lofty peninsula with perpendicular rocks, washed at their base by the German Ocean, it was only necessary to defend it artificially on the fourth or western side. There it is protected by a deep ditch cut in the rock, and by enormous curtain walls 12 feet thick and about 50 feet high (Fig. 376), crowned with battlements, but without machicolations. In front of this is a large level court about 500 feet long by 220 feet wide, beyond which there is another deep ditch and high mound. On the north side this platform is protected by perpendicular rocks and the sea, and on the south side by a rocky ravine, through which a small burn discharges into the sea.

Still further westwards, by about 200 feet, there is another mound and ditch running from the rocks on the north to near the ravine on the south, when its turns eastwards, and runs parallel to the burn till it joins the first enclosure.

The entrance road to the castle lay between the last mound and the burn, and was thus carried round, and commanded by a considerable part of the outworks before it reached the gateway at the south end of the outer court. The entrance to the castle itself (Fig. 377) was by a drawbridge over the ditch, and a lofty gateway, 10 feet wide, with pointed arch and good mouldings (Fig. 378). The groove for the portcullis may be seen in the centre of the archway. Although not so ornate as the gateway of St. André (Fig. 28), still this archway of Tantallon was similar in style, and must have had a correspondingly grand and imposing effect. There was a guard-room on the south side of the vaulted passage, and a straight stair in the north wall leading to the rooms above and to the battlements. Unfortunately the interior of the keep is now so entirely demolished that its arrangements cannot be made out.

The curtain walls running north and south from the entrance fall backwards at an angle from the central keep, part of which is projected so as to flank the curtains. These are also strengthened by large towers

at the northern and southern extremities, where the building touches the perpendicular rocks. The curtains were perforated with staircases

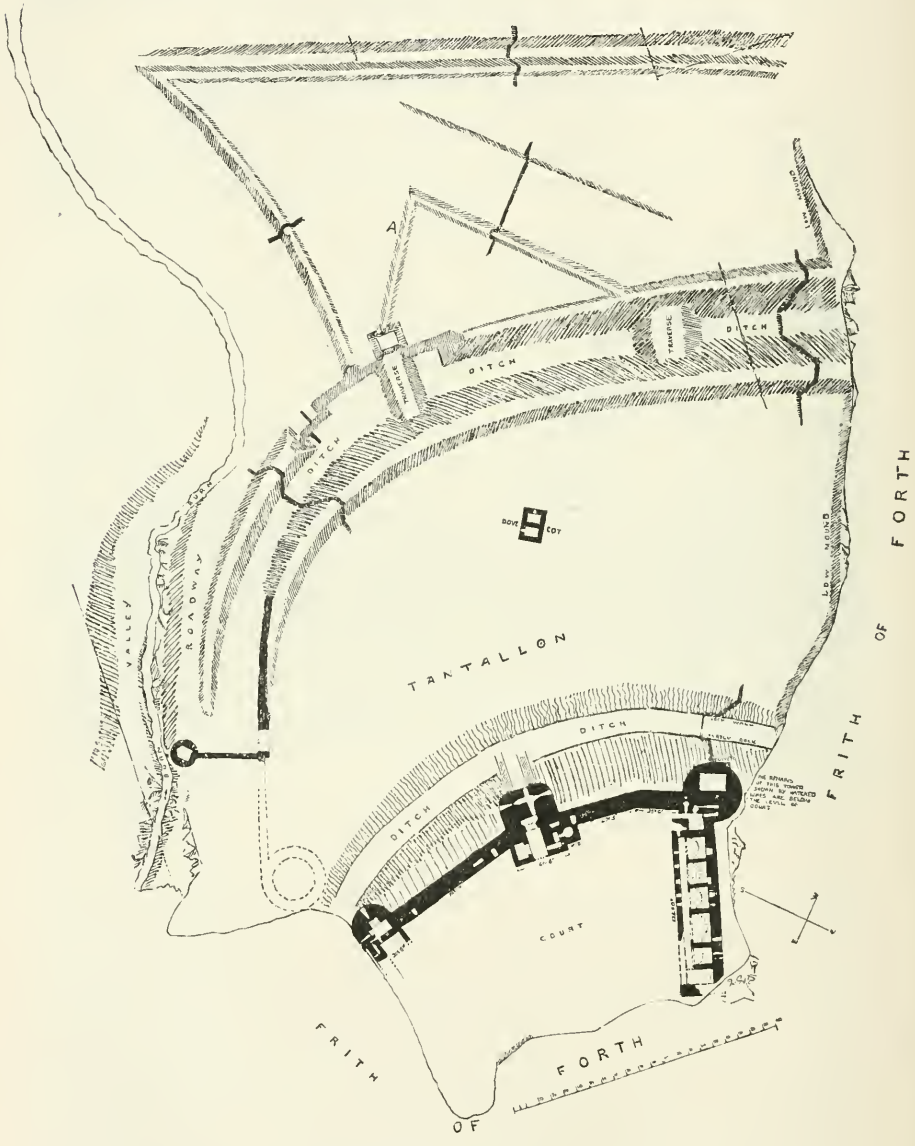


Fig. 375.—Tantallon Castle. Plan of Site.

and passages communicating between the keep and the north and south towers, but, as afterwards to be explained, these are now built up.

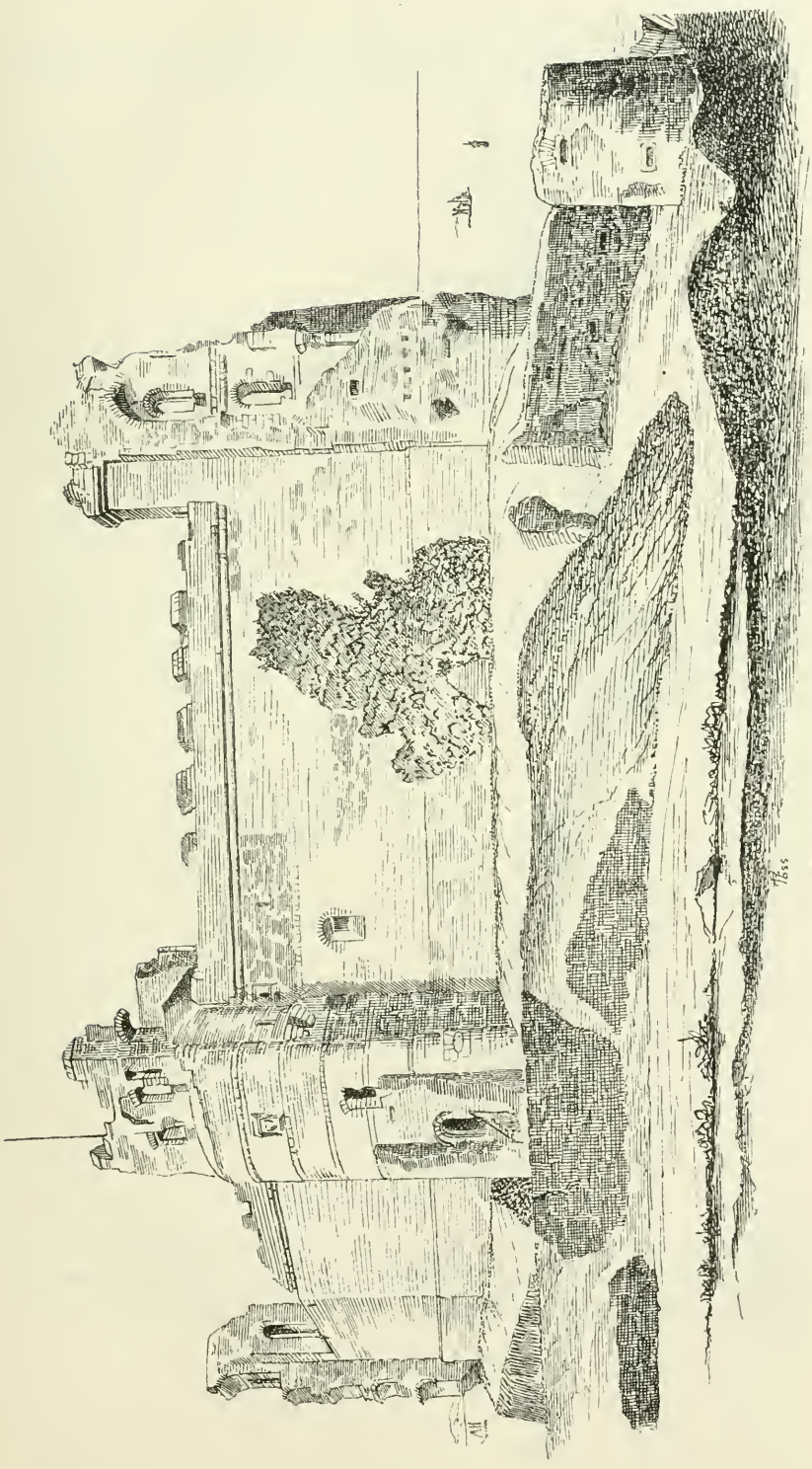


FIG. 376.—Tantallon Castle. View from the South-West.

The hall and other apartments, which are of more recent construction, were situated along the north side of the enceinte, with vaulted

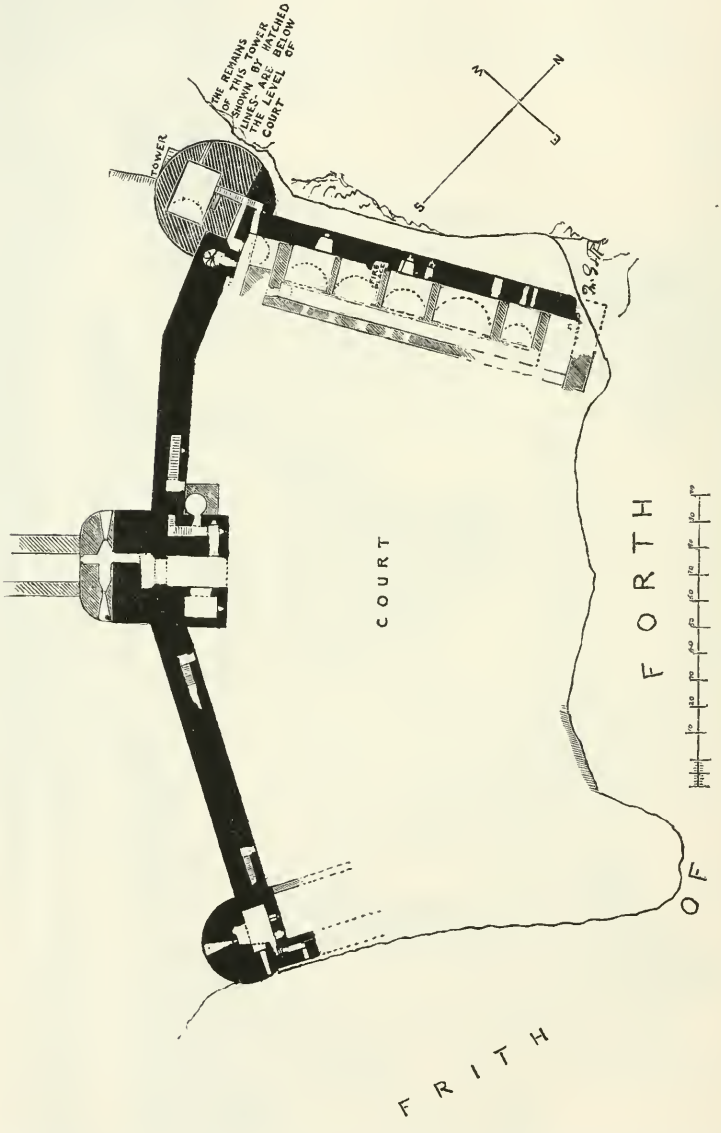


Fig. 377.—Tantallon Castle. Enlarged Plan.

cellars below and bedrooms above. The hall was roofed with strongly framed timbers, the design of which may be traced in the recesses formed for the principal rafter next the west wall (Fig. 379). But it

does not seem to have been an open timber roof, as there are windows in the side wall which appear to have belonged to small rooms in the roof. There were also numerous rooms in the angle towers.

The buildings were probably continued all round the quadrangle. There are distinct traces of them on the south side, but those on the east or seaward side have been undermined by the waves, and are now washed away.

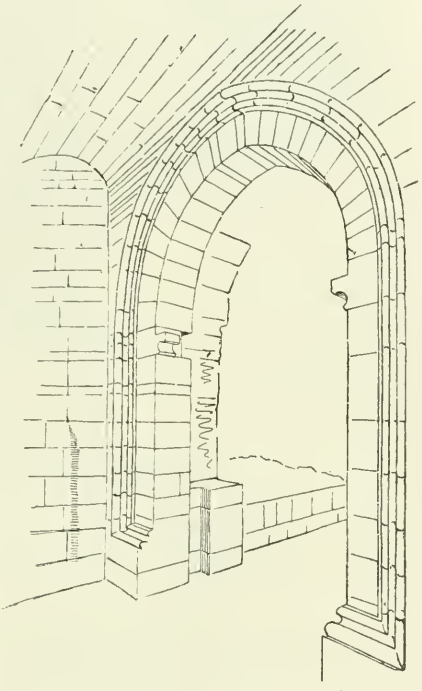


Fig. 378.—Tantallon Castle. Entrance Gateway.

There is a historical event connected with Tantallon which is very interesting in relation to its architecture and defences. In the year 1528 the castle belonged to the Earl of Angus. James v., who hated the Douglases, by whom he had so long been held in subjection as a youth, laid siege to Tantallon with all the artillery he could command, but he found it useless against the great strength of the walls. The castle was however soon afterwards yielded up by its commandant to the King, who immediately enlarged and fortified it. Lindsay of Pitscottie relates that "the King gart garnish it with men of war and artillery, and put in a new captain, to wit, Oliver Sinclair, and caused masons to come and ranforce the walls, which were left waste before as trances or through passages, and made all massey work, to the effect that it should be more able in time coming to any enemies that would come to pursue it." This work of James v. is very visible to the present day. His object has been to make the walls as solid as possible, by building up all the passages and apertures in the thickness of the walls, so as to prevent them from being breached by cannon. Thus the entrance tower (Figs. 376 and 377) has the fine ancient gateway blocked up with a wall in front of it, with only a small door and narrow passage left, while embrasures for guns are formed at each side to sweep the ditch and protect the curtains. Similar embrasures have been inserted in the north and south towers. The west front of the central tower has been entirely cased with new masonry. There is no difficulty in distinguishing the new work from the old, as the latter is of a fine hard-grained freestone, while the newer work is of a softer greenish tufa, which was pro-

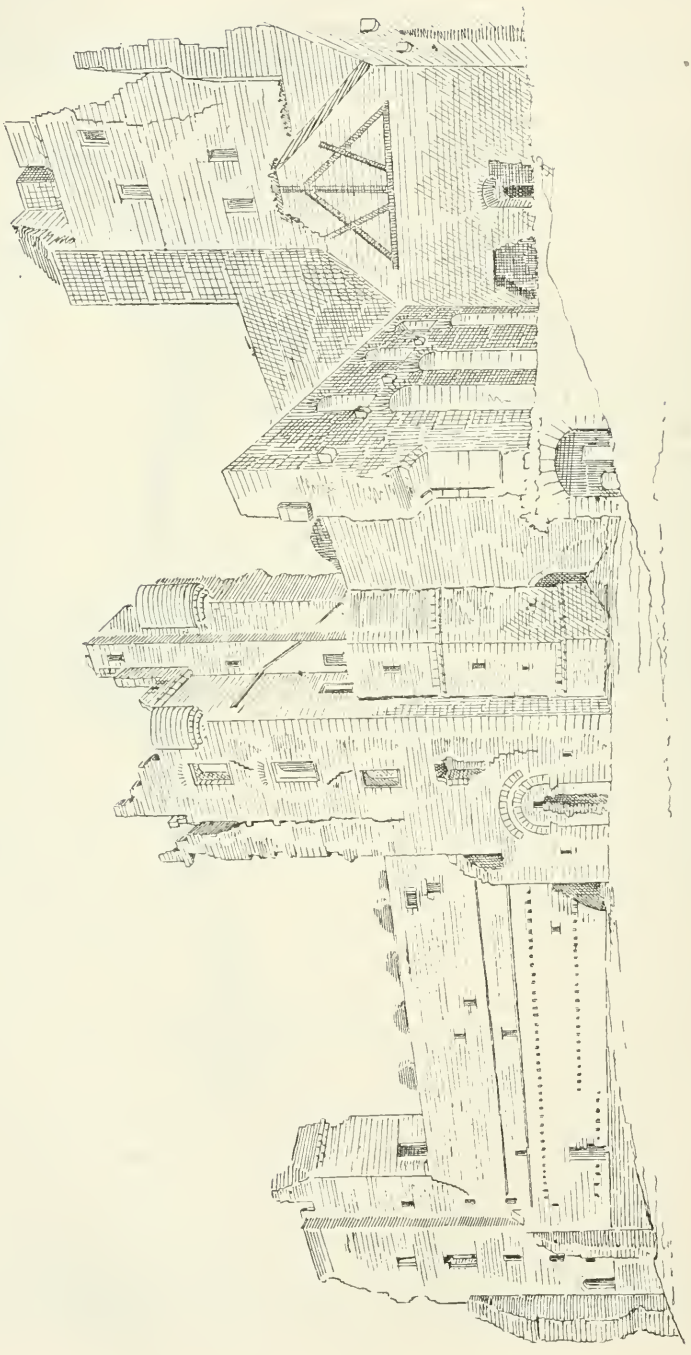


Fig. 379.—Tantallon Castle. Interior of Courtyard.

bably used as being better suited for resisting cannon balls, and less liable to splinter.

The outworks at Tantallon are also of great interest in connection with the above siege and the use of artillery. Although cannons were used by James II. at the siege of Threave Castle, where Mons Meg was employed, and at the siege of Roxburgh Castle, where James was killed by the bursting of a cannon, still we have few traces of guns being used for purposes of siege till the instance above quoted at Tantallon in 1528.

The means there adopted to resist the siege operations are still distinctly traceable (Fig. 375). As above mentioned, the outer court, beyond the great curtain and ditch, was defended by a deep ditch and high mound extending across the full width of the peninsula in front of the castle. The mound was faced with stone, so as to present a perpendicular wall to the outside. Most of this wall has fallen and disappeared, but some parts still remain, together with the gateway and gatehouse at the south end. At the time of James V.'s alterations the latter has been provided with embrasures for guns (Fig. 376) to flank the gate and sweep the ditch and the roadway, and there are traces of older works in this locality which these have superseded. The ditch itself has been provided with traverses to protect it from being enfiladed from the ground on the north or south; while in the outer court to the west, earthworks in the form of a modern ravelin have been thrown up, and are still preserved.

In 1639 Tantallon was taken and destroyed by the Covenanters. It is now the property of Sir Hew Dalrymple, Bart.

DIRLETON CASTLE, Haddingtonshire.

Dirleton Castle is a fine example of a thirteenth-century building restored in the fifteenth century. The earlier portions of this castle have already been described (pp. 114-116). As then pointed out, some fragments of the original buildings remain, and have been incorporated in the new work, and probably the remainder is erected on the old foundations. The entrance gateway and moat are well preserved, and give a good idea of that kind of defence (Fig. 380). The moat has been at least 50 feet wide, and to enable this to be spanned, four piers are built to carry a wooden bridge, which no doubt was moveable (Fig. 381). Between the nearest piers and the building there is an aperture of 11 feet, which was spanned by a drawbridge, and the sill of the doorway under the drawbridge slopes so steeply that no one could stand on it when the drawbridge was raised. The ingoing of the gateway is further defended with gates and portcullis (see Fig. 89, page 114), and

there are machicolations in the walls above, and an aperture in the floor

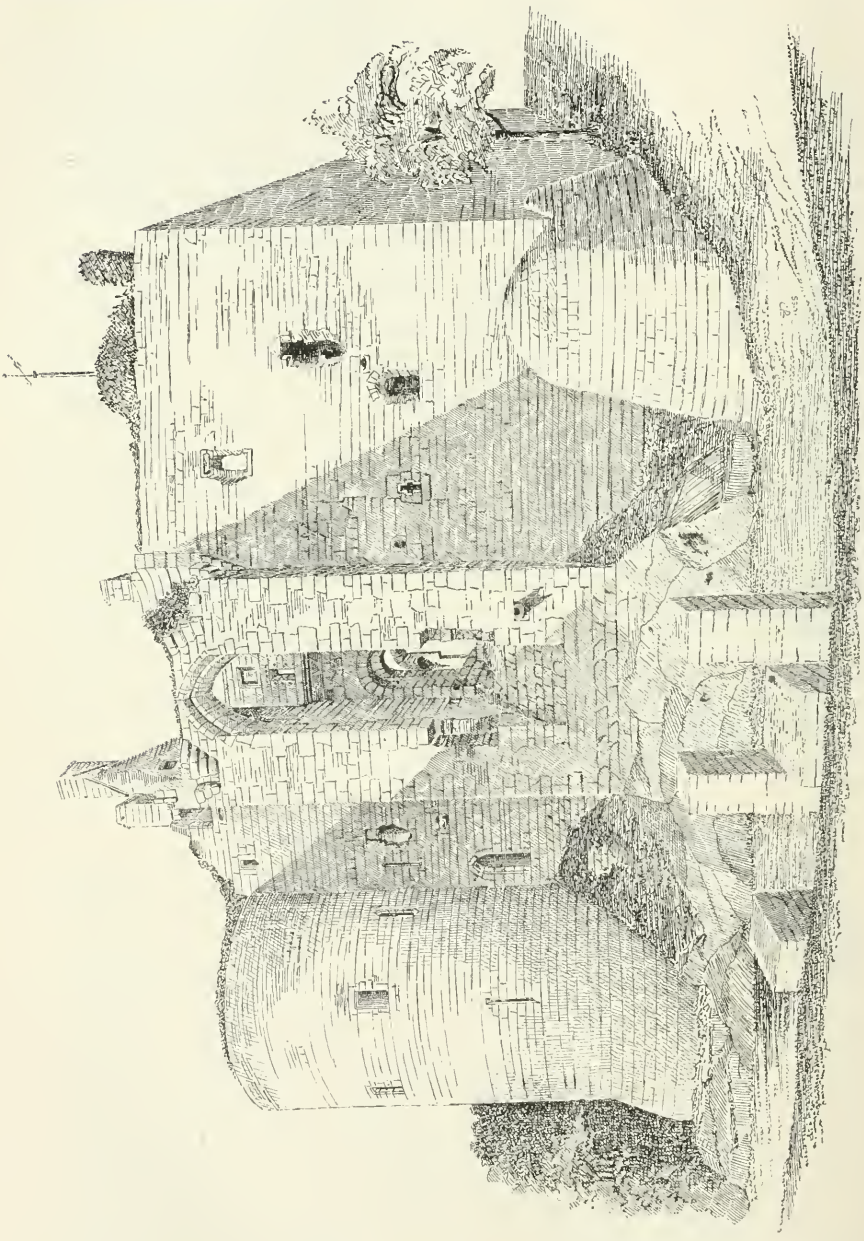


Fig. 380.—Dirleton Castle. View from the South.

of the portcullis-room (Figs. 381 and 382), from which assailants may be

attacked. On the east side there is a great range of buildings, with an enormously thick outer wall (Fig. 382). Part of the basement floor is hollowed out of the solid rock, and the great and irregular thickness of the east wall may have been caused by some inequality in the foundations. The basement is lofty and vaulted (section, Fig. 383), and contains the bakery, with ovens and draw-well and large vaulted cellars. Above the

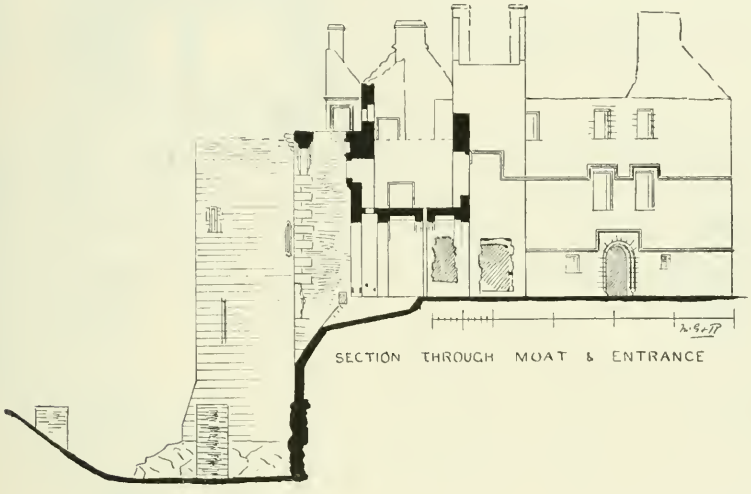


Fig. 381.—Dirleton Castle. Section.

bakery is the kitchen, which is very lofty (Fig. 383), and is vaulted, with a ventilation opening formed in the roof. It has two great fireplaces, and a service room leading to the hall. The hall has been 72 feet long by 25 feet wide, and had probably an open timber roof. The screens, with minstrels' gallery, would be at the south end, and the dais, with fireplace, at the north end. At the screens there is a stair leading down to a hatch in the vault of the bakery, by which the viands could be sent up, and there is a small pantry next the hall, where they could be kept. There is also a handsome stone seat in the screens, with a carved canopy.

At the north end are the apartments of the lord, having a stair communicating with the hall and the cellars on one side, and on the other side a private outer door and a stair down to the prison or guard-room (shown on Fig. 383, and also on Fig. 89, p. 114), beneath which, for the more dangerous culprits, there is a dungeon entered from a hatch in the floor. In the lord's room there is an ambry, which has had some good carving round it, but it has been sadly destroyed. The private room has also a window overlooking the cellar, from which orders and instructions might be given. The same kind of window communicating with the cellar

occurs at Linlithgow. This part of the building was probably carried higher, and contained the family bedrooms. There has also been a wing along the north side of the court, which may have contained additional family accommodation. At a later date (sixteenth century) another hall has been built in connection with the old towers at the south-west corner

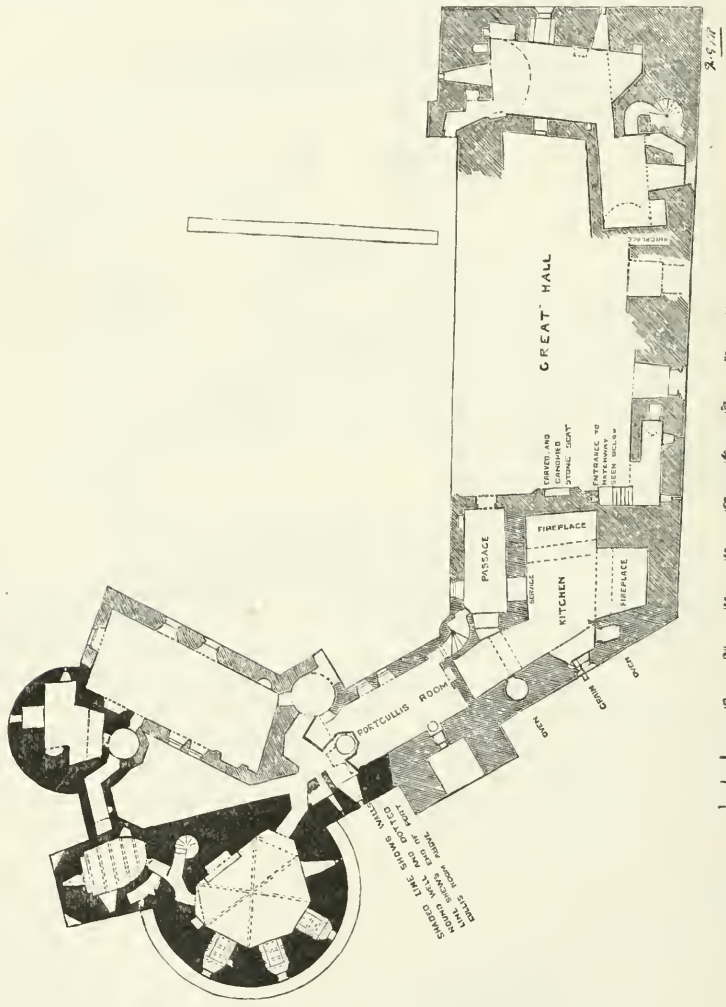


Fig. 382.—Dirleton Castle. Plan of First Floor.

(the elevation of which towards the courtyard is shown in Fig. 381), with a separate staircase leading to bedrooms on the upper floor. These belong to the period when private dining-rooms and reception-rooms were introduced, and the common hall to a great extent disused.

This block contains an archway leading to a small courtyard between the new buildings and the ancient towers at the south-west angle. Walls enclosing an outer courtyard have been erected, probably in the seventeenth century. A circular arched gateway and a fine circular dovecot, with some fragments of the walls, are still preserved on the north-east side. These are not shown on the plan, being at a considerable distance away. They are late erections,

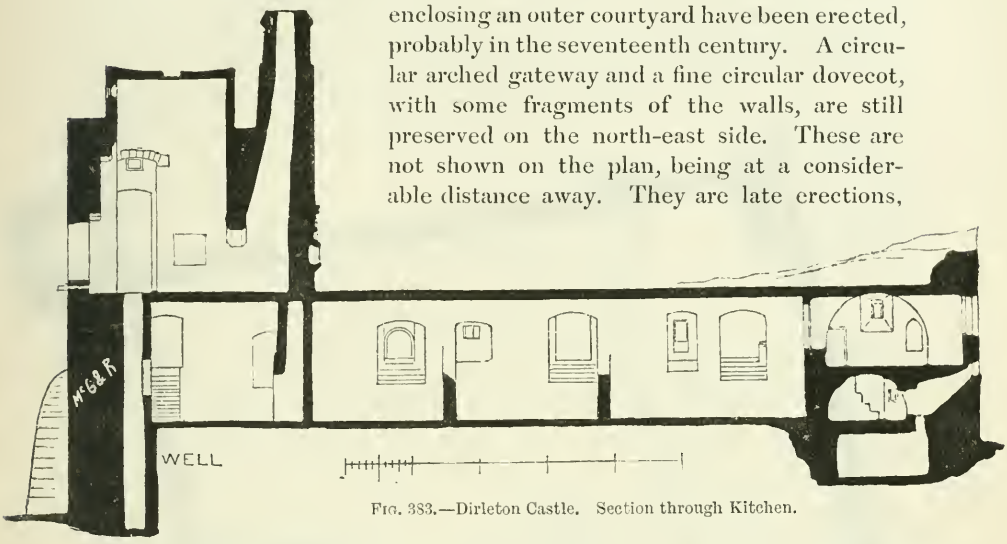


Fig. 383.—Dirleton Castle. Section through Kitchen.

probably of the seventeenth century or end of the sixteenth. Dirleton has been a ruin since it was battered by Monck in 1650.

SPYNIE PALACE, Morayshire.

This has been one of the finest of our fifteenth-century castles. Spynie was the original seat of the Cathedral of Moray, but it was removed to Elgin as a more suitable situation by a Bull of the Pope in 1224. The chief palace of the Bishops of Moray, however, remained at Spynie, which is about $2\frac{1}{2}$ miles north from Elgin.

The present building consists of a large strong keep, with other buildings surrounding an extensive courtyard. Such keeps were frequently erected in connection with monasteries and other ecclesiastical foundations, as a place of security for the occupants and their treasures in troublous times. The palace is situated on a rising ground which was formerly close to the loch of Spynie, but the loch has now almost entirely disappeared, the water having been drained away.

The keep (Fig. 384) is placed at the south-west corner of the palace. It is 62 feet 5 inches from north to south, and 44 feet 3 inches from east to west. The walls are 10 feet 6 inches thick, and the height of the corbels which carried the battlements is 70 feet.

The tower contained six stories (section, Fig. 385), the basement and the top story but one being vaulted, and the intermediate floors of wood.

In the thickness of the eastern wall there was a series of five vaulted chambers, 6 feet 8 inches wide, placed over one another, one on each floor, but these have now disappeared. Although the exterior walls are well preserved, the interior building, including these vaulted chambers, is entirely demolished. The basement floor, however, is in fair preservation. There are two entrances on this level, one inside the western

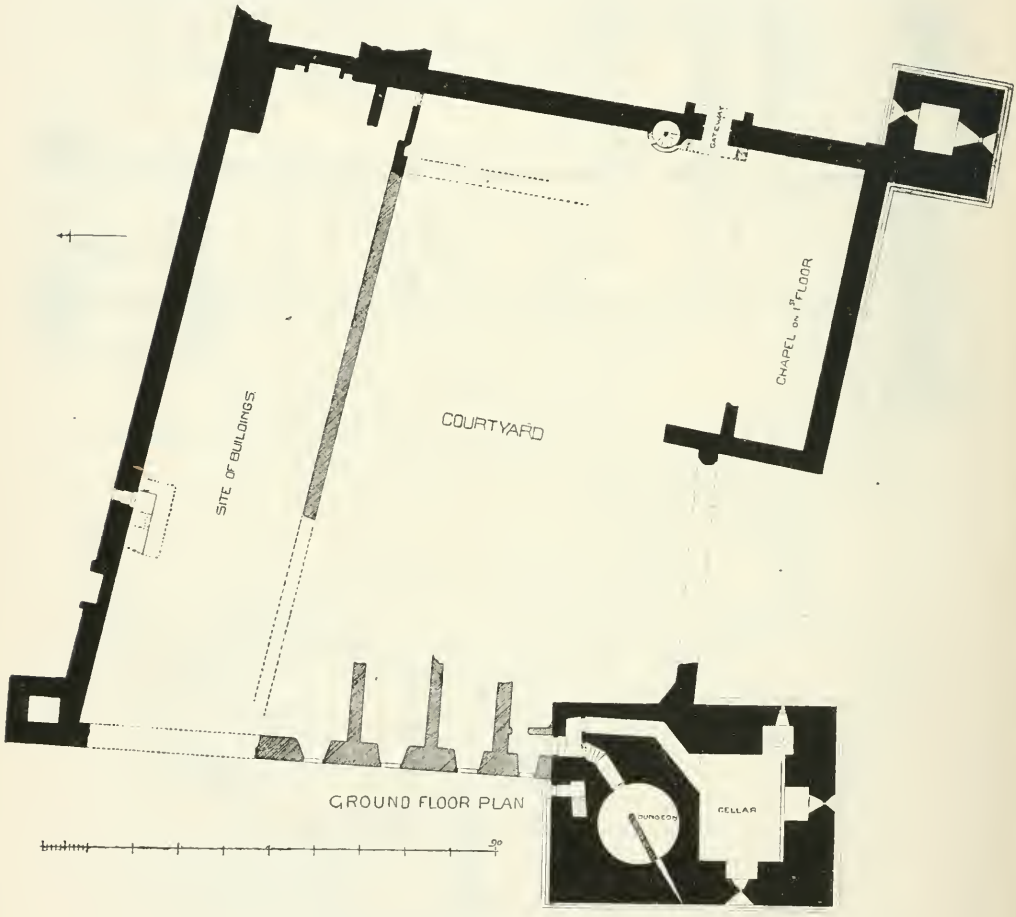


Fig. 384.—Spynie Castle. Plan of Ground Floor.

wall of enceinte giving access to the basement, and the other outside the wall, and leading by a stair to the hall on the first floor. The latter would thus serve as a means of escape in case of need, or as a passage for private ingress or egress. The basement is divided into two compartments, with a separate passage conducting to each, the south one being evidently the wine-cellar, as it is provided with a hatch at the

south-east corner for hoisting up supplies to one of the small chambers adjoining the hall. This cellar has also been used for purposes of defence, being provided with two port-holes for guns, one to the south and the other to the west. The form of these port-holes is remarkable. They are of the shape first adopted on the introduction of artillery, having an enormous splay to the exterior. The external aperture of these embrasures (Fig. 386) is fully 6 feet wide and 2 feet 6 inches high.

The other compartment of the ground floor is circular, 17 feet 6 inches in diameter, and is some steps down from the entrance door. It has only one very small and narrow opening for air, carried diagonally through the wall, probably for the purpose of making communication between the exterior and interior as difficult as possible, as well as to throw the faint gleam of light which enters by it on the entrance door. From the general features of its construction this cellar would seem to have been the prison.

The principal entrance to the keep is on the first floor (Fig. 385), close to the wall of enceinte, with which it was no doubt connected by a drawbridge. Adjoining it on the north is a newel stair in the thickness of the wall, leading to the upper floors and the roof. The steps are 4 feet 6 inches long. This stair also gives access to an entresol in the north wall, containing a guard-room, from which there is a door to the battlements of the west wall of enceinte (see Plan of Entresol, Fig. 385).

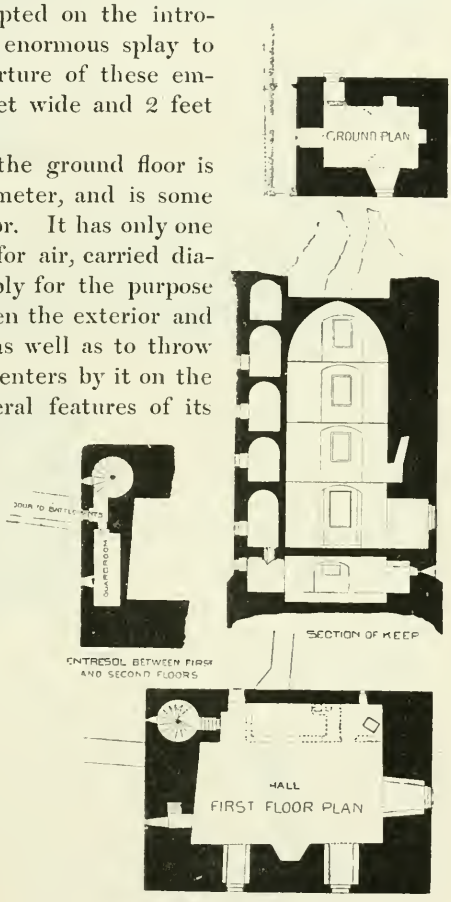


Fig. 385.—Spynie Castle. Section and Plan of First Floor of Keep.

The hall, which is 42 feet by 22 feet 6 inches, occupies the whole of the first floor, except the wall chambers in the east wall already mentioned. The chamber at the south end, with the hatch to the cellar, was probably the private room. The other small apartments on the various floors on this side were no doubt bedrooms. Their width (6 feet 6 inches) is just sufficient for a bed. There are remains of two flues, which were probably those of garde-robes, connected with these apartments.

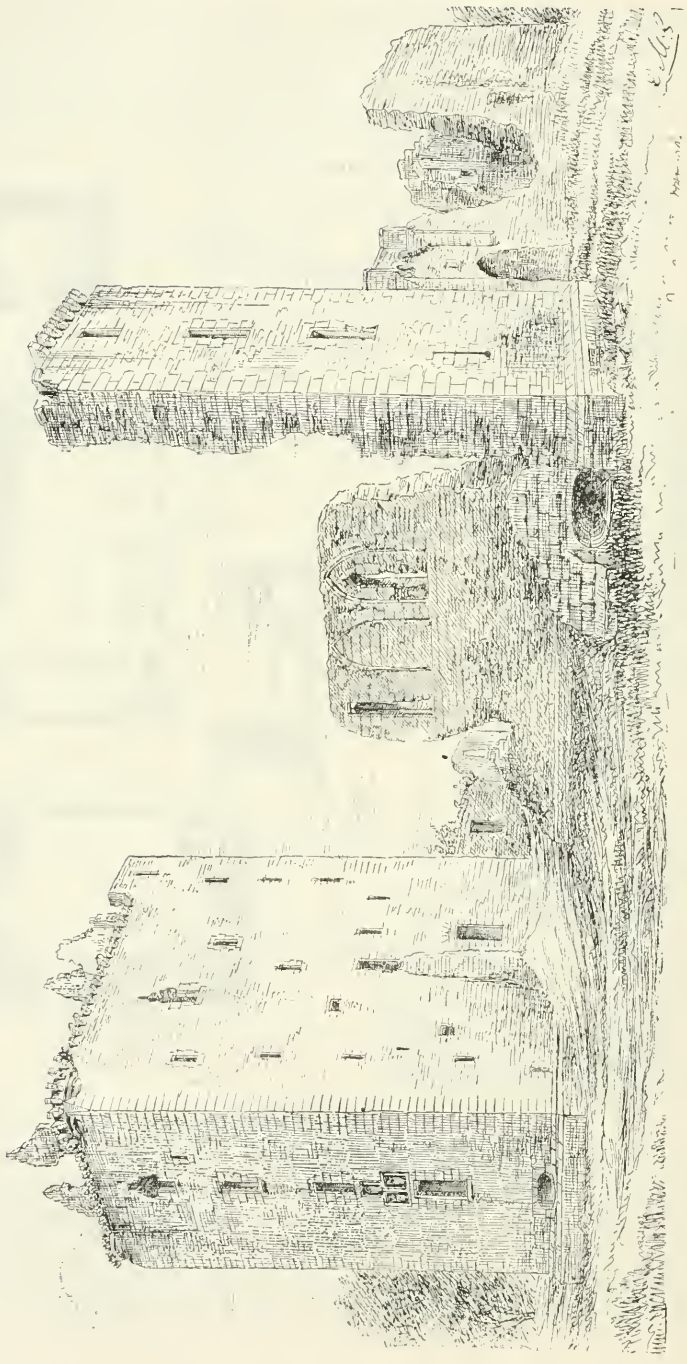


Fig. 386.—Spynie Castle. View from the South-East.

The windows of the hall are large, and have stone seats in their deep bays.

The keep is so placed as to form a main defence on the landward side, from which attack would be chiefly apprehended, and it is projected in such a manner beyond the enceinte as to protect it both on the east and north.

The elevation (Fig. 386) is very simple and plain. The bold double-splayed base is an unusual feature, while the large triple corbels at the parapet are of the style frequently adopted at that period, as at Dunnotter, Clackmannan, etc.

On the south front there are three panels for coats-of-arms. The upper one, which probably contained the Royal arms, is empty, and the two lower ones contain the arms of Bishops David Stewart and Patrick Hepburn.

The keep is said to have been built by Bishop David Stewart, who died in 1475. The Earl of Huntly had threatened to "pull him out of his pigeon-holes," and the Bishop replied that he would build a house out of which the Earl and his whole clan should not be able to pull him. If this is a true tale, the keep may thus have been erected at a later date than some other portions of the palace. Indeed, we shall find immediately that this probably was so. But it should be observed that the keep corresponds in style with the south-east tower, and it is possible that Bishop Stewart, when he built the keep, also added the towers at the angles of the enceinte.

The quadrangle has been of considerable extent, and the buildings appear to have been of an unusually fine character, but unfortunately only portions of the wall of enceinte and a few fragments attached to it now remain.

We have seen that the keep occupies the south-west corner. The other three corners were also each defended by a smaller tower. One wall of that at the south-east angle still survives (Fig. 386). This tower has the same immense port-holes for guns, and the same style of corbels at the parapet, as the keep, and is undoubtedly of about the same period. The north-east tower is almost entirely demolished, and of the north-west tower only about one-half remains.

Fortunately a very fine and quite unique feature in this palace is still in fair preservation, viz., the gateway in the eastern wall (Fig. 387). It is of fine design, and of a style most unusual in Scotland. It bears the arms and initials of Bishop John Innes, who was consecrated in 1406, and may thus be older than the keep. It was defended by a portcullis, and a small stair led to battlements, from which the portcullis was worked. The mouldings and design generally have more affinity with the architecture of England or France than of Scotland. It is natural to expect that a Bishop's palace should partake to some extent of the

superior architecture of ecclesiastical buildings, and there are other indications in the ruins that Spynie did so. Thus in the south wall of enceinte there are the remains of arches (Fig. 384), which seem to have contained large traceried windows, said, with probability, to have been the windows of the chapel. These have been built up at a later time, and smaller, but still church-like windows substituted for them.

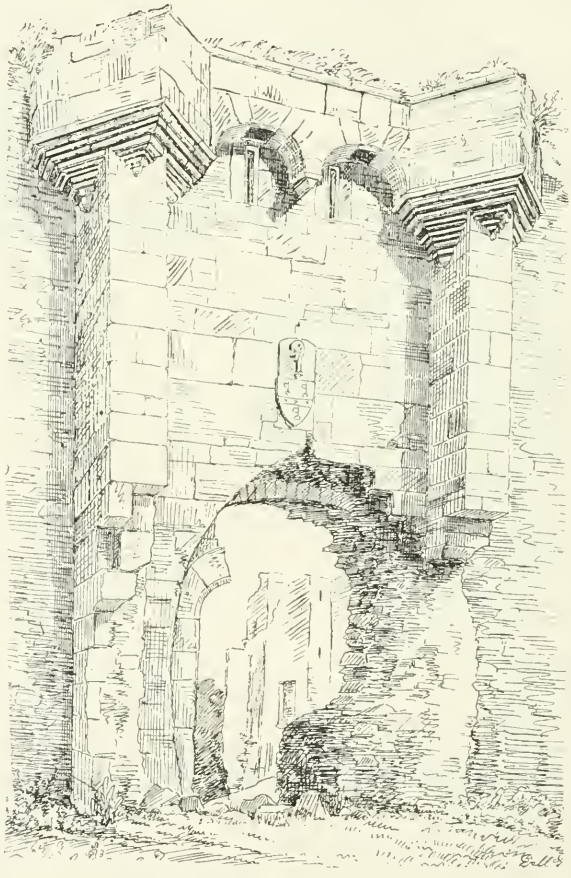


Fig. 387.—Spynie Castle. Gateway to Courtyard.

As the Cathedral was rebuilt (after its destruction by the Wolf of Badenoch in 1390) during the episcopate of Bishop John Innes, he would not want for architectural assistance in the erection of his palace, and we may safely attribute the superior and unusual style of the palace to the presence of architects from a distance, who were engaged in the rebuilding of the Cathedral.

There has been a large range of buildings for residential purposes along the northern wall of enceinte. These probably contained the hall and reception-rooms, which, in addition to the keep, were commonly erected in the courtyard of the castles of the nobles in the fifteenth century. But these, as well as the buildings which ran along the east and west walls of the courtyard, are now so completely destroyed that their bare outline can scarcely be traced.

In 1590 King James VI. created the Church lands into a temporal barony, and bestowed them on Alexander Lindsay, son of the Earl of Crawford, with the title of Lord Spynie.

EDINBURGH CASTLE.

As might be inferred from the natural strength of its situation, the Castle of Edinburgh is of very ancient date. Its name is attributed to Edwin, the Northumbrian king, who is said to have rebuilt the Castle in the year 626. The name of the "Maiden Castle," or, in its Latinised form, "Castrum Puellarum," has also been frequently applied to the Castle. This name is supposed by some to have reference to a nunnery which is believed to have existed within the walls at an early period; but Dr. Robert Chambers thinks that it is of Celtic origin, the word "Maiden" being of frequent use as applied to fortifications, and is probably a corruption of *Mai Dun*, signifying "a fort commanding a wide plain or district."

Edinburgh Castle was used as a fortress by the Scottish kings from an early period. It was occupied by Malcolm Canmore, and at his death was besieged by Donald Bane in 1093, for the purpose of getting possession of Malcolm's son, the young King Edgar.

Queen Margaret died in the Castle the same year. Her body was conveyed to Dunfermline, and Edgar made his escape by the postern, which was no doubt situated at the west side, somewhat in the position of the more recent postern now built up, but still distinctly visible in the wall. In 1107 occurs the first notice of the tower as a royal habitation, under Alexander I., and in the reign of David I. the Castle is for the first time designated a royal residence. Under his successors, William the Lion, Alexander II., and Alexander III., it became the principal residence of the King, and the depository of the national records and the regalia. The Castle was besieged and taken by Edward I. in 1291, and was frequently taken and retaken during the War of Independence.

What the appearance of the Castle was in those early times we have no means of knowing, as it was entirely demolished by Bruce, in pursuance of his usual policy of leaving no place of strength standing which

could form a point of support to the enemy. This was undoubtedly its condition in 1333, when Guy, Count of Namur, an ally of Edward Baliol, was driven by Randolph to the Castle rock, and had to surrender, as the Castle was so entirely dismantled as to be indefensible.

The only building of the early period which appears to have escaped is the small chapel in the Norman style, called St. Margaret's Chapel, which was probably founded by David I., the great church builder, in memory of the sainted Queen—at least its style is that of the first half of the twelfth century.[1]

In primitive times the Castle would no doubt consist of an enceinte or enclosure of mingled turf and rocks, taking in the highest and most defensible part of the rock, and would contain some wooden huts for the

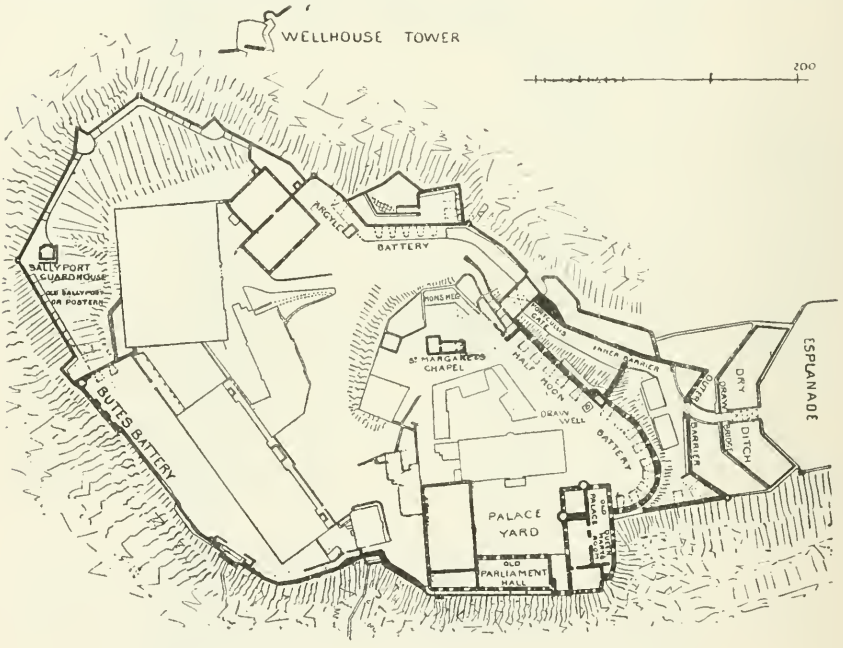


Fig. 388.—Edinburgh Castle. General Plan (from the Ordnance Survey).

accommodation of the garrison. This enceinte would in course of time be superseded by a stone-and-lime wall, with towers at intervals after the manner of mediæval fortresses. There was also probably, as usual, a keep or tower, larger and stronger than the others, serving as the residence of the commander, and as the last refuge of the garrison in case of siege.

[1] Mr. Blanc, who has made a very careful examination of this building, with a view to its restoration, is of opinion, judging from the crudeness of the details and manner of execution, that it was probably built during Queen Margaret's lifetime, *i.e.* before 1093.

From the natural configuration of the site the general disposition of the various parts must at all times have been much the same.

The entrance would always be by the same narrow pass by which the Castle is now approached (Fig. 388). This would lead to the outer or lower court (where the Governor's house, the barracks, armoury, etc., are now situated), while the inner court would occupy the highest point (where the Palace yard now is), the only access to which seems to have been by a flight of steps in the face of the rock.

The Castle was rebuilt by Edward III. in 1344, as one of a chain of fortresses to hold the south of Scotland in subjection. It is most probable that the buildings would then be erected on the same plan and in the same style as the numerous fortresses erected by the Edwards in Wales, viz., a great enclosing wall with towers at intervals. There would be comparatively slight erections within the enceinte for the garrison.

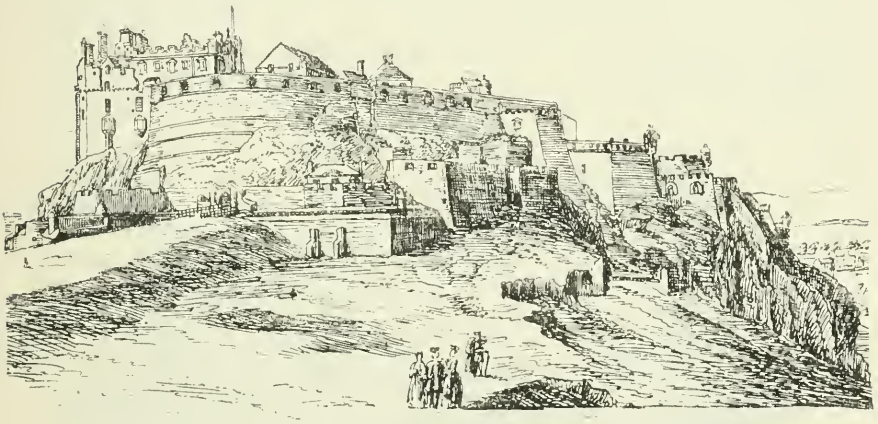


Fig. 389.—Edinburgh Castle. From a Drawing by T. Sandby about 1750, in Maitland's *History of Edinburgh*.

and no large building for a residence. When David II. returned from his captivity he made the Castle his chief abode. He added greatly to the fortifications, and built a large keep, called David's Tower, which occupied a position above where the Half-moon Battery now stands, and which remained till the siege by Drury in 1573. In 1368 and 1371 there are various entries in the Exchequer Rolls of payments for the building of the new towers ("ad fabricam nove turris de Edynburgh et ad emendum bordas ad eandem"), also for the construction of a sink, vat, and basin. In 1379 the kennels were erected for the King's dogs; in 1382 a kitchen was built near the great tower "et aliis domibus necessariis ad modum vaute factis." David's Tower was evidently at that time the keep or chief building in the Castle. It was 60 feet in height, and con-

tained a lord's hall and a new court kitchen, besides chambers and lofts. At one time there were thirty culverins mounted on the battlements, but these were removed in 1540, and in 1562 a piece of ordnance, styled a "Moyane" was hoisted to the top of the tower.

In 1385 the town of Edinburgh was burned by the Duke of Lancaster, but the Castle repelled his siege. It was probably in consequence of the risk they ran from similar conflagrations that, under Robert II., the townspeople were allowed to build houses for security within the Castle walls, which must therefore have been of considerable extent.

With the accession of the Stewarts to the throne, Edinburgh became the chief burgh of the kingdom. The Jameses resided chiefly here, and it would appear that they considerably extended the accommodation by building a hall and Royal apartments at the south-east corner of the Castle rock. This building is well seen from the Esplanade, whence also may be observed the corbels which mark the former height of its parapet at the floor line of the top story, which is evidently a late addition (Fig. 389).

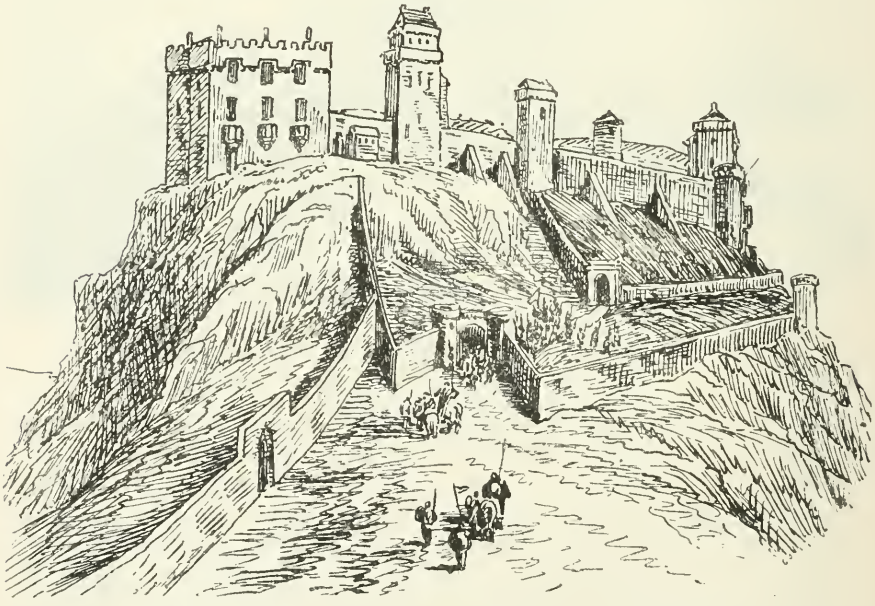


FIG. 390.—Edinburgh Castle. Restoration by Dr. Robert Chambers.

It was about this time that the Scottish nobles began to find the accommodation of their keeps or donjons too restricted, and when they commenced to build halls and more commodious residences within the

enceintes of their castles. We know that this course was pursued by the Jameses at their other castles, such as Stirling and Linlithgow, and the same plan seems to have been followed here. From the Exchequer Accounts for 1433, 1434, etc., we find that considerable sums were expended for the construction of a "magna camera," or great hall, for the King. In 1438 lead for the roof of the King's great chamber is brought from Berwick to Leith, and in 1458 there are payments for repairing the hall of the Castle, and providing linen cloth for the windows and other decorations, in preparation for the meeting of Parliament. The hall referred to is situated on the south side of the Palace yard.

James II. when a boy resided in the Castle, in the custody of the Chancellor, Crichton, when the well-known incident of the entertainment of Lord Douglas and his brother before their slaughter is said to have taken place in this hall in the year 1440.

In consequence of that event Crichton was besieged in the Castle for nine months, but held out successfully.

Considerable additions were made to these Royal apartments at various times, especially during the reigns of Queen Mary and James VI., some of which still remain, and will be afterwards referred to; but in Mary's time the Castle also sustained immense injury, and almost all traces of its earlier form were at that time obliterated.

In 1572 the Castle was held for Mary against her son's Government by Sir William Kirkcaldy of Grange. The drawing (Fig. 390) of the east part of the Castle, restored by Dr. R. Chambers as before 1573, shows his idea of the appearance which the east front of the Castle then presented. On the left (or south) stands the Palace (part of which still remains), then comes David's Tower and the high curtain wall, with the Constable's Tower at the north end, and a smaller tower in the centre. The Constable's Tower was 50 feet high, and was approached by a flight of steps, forming the only access to the upper platform of the rock, and was provided with a portcullis. This drawing shows, no doubt, in a general way, the positions of these various buildings, but the restorations are to a large extent imaginary, and it must not be supposed that they give a reliable representation of the demolished towers.

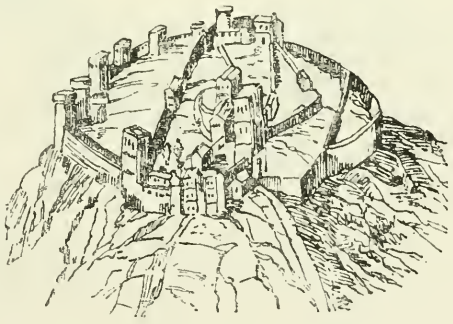


FIG. 391.—Edinburgh Castle. From Wilson's *Memorials of Edinburgh.*

Fig. 391 also shows the Castle as it existed before the siege of 1573, while the drawing (Fig. 392) is traced from a facsimile, published by the

Bannatyne Club, of a plan of the siege of 1573, which accompanied a report prepared at the time by command of Sir William Drury.

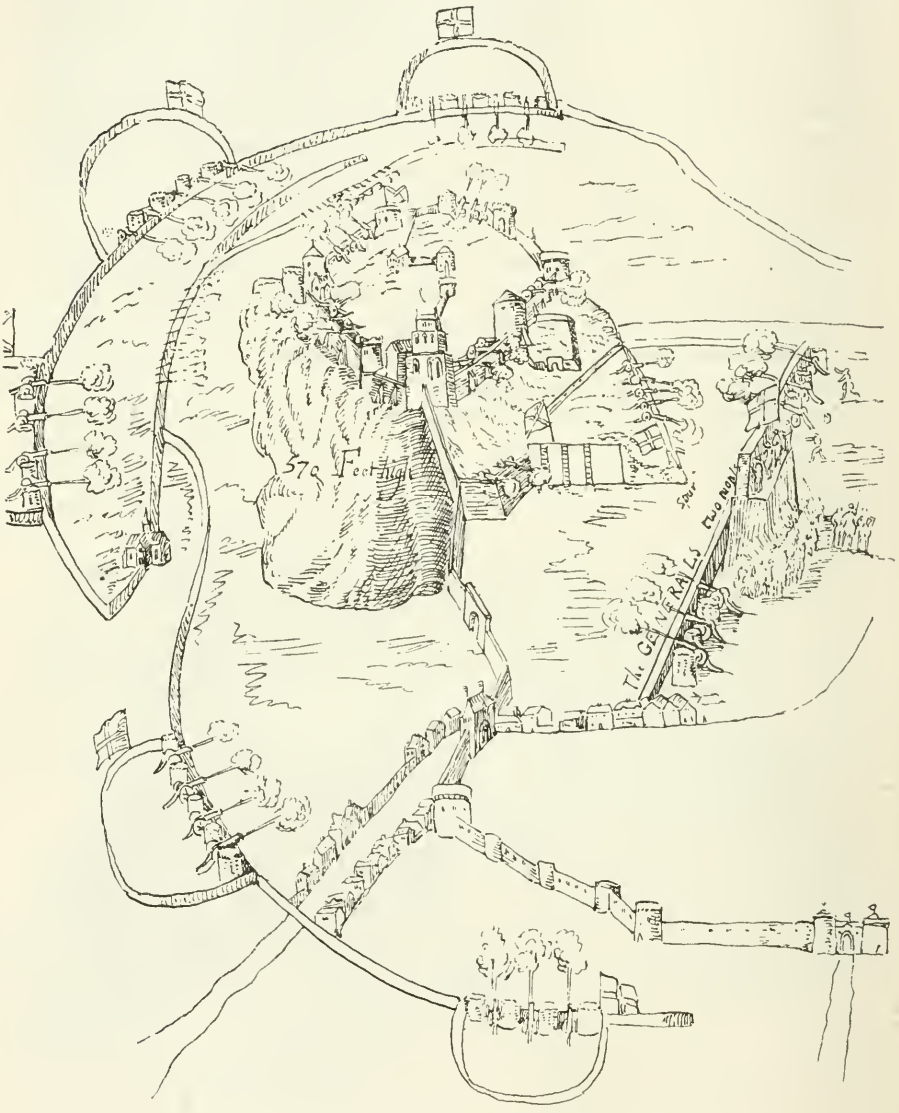


Fig. 392.—Edinburgh Castle. Siege by Sir William Drury.

The following is the description of the Castle contained in that report, which is entitled

"A Survey taken of the Castle and Towne of Edinbrogh in Scotland by us Rowland Johnson and John Fleminge servantes to the Q. Ma^{tie} by the Comandement of Sir William Drury, knighte, Governo^{r} of Berwicke and Mr Henry Killigrave Her Ma^{ties} Embassadors as followethe [27 January 1572-3]:

"Furste, We fynde the Castle standinge upon a natural mayn rocke on greate hightes like vj^{c} foote longe and iiij hunderethe foote brode.

"On the fore parte estwarde, next the towne stands lyke iiij^{xx} foote of the waule, and next unto the same stands Davyes Towre and from it a courten with vj cannons or such lyke peaces in loopes of stone lookinge in the Streatwarde; and behynd the same standes another teare of ordinance lyke xvj foote clym above the other, and at the Northe side stands the Constables Towre and in the bottom of the same is the way into the Castle with —— steppes.

"Also we fynd upon the said este syde a Spurre lyke a bulwarke standing befor the foot of the rocke that the said courten stands on, which spurre incloseth that syde flanked out on both sydes; and on the Southe syde is the Gaite where they enter into the Castle, which spur is like xx foote hye, vamyred with turfe and baskets set up and furnished with Ordinance.

"The lowest parte on this syde of this courten waule is xxiiij foote hye and the rocke under the foute of the waule where it is lowest is xxx foote. Davyes Towre is about lx foote hye, the Constables Towre is lyke l foote. We fynd that there is no myndinge can prevaile in this rocke but only battery with ordinance to beat downe the waules and so to make the clyme."

From this description, and the contemporary drawing, it is possible to make out that the general position of the buildings, batteries, etc., fronting the east was not unlike that shown in Dr. Chambers's restoration. The form of David's Tower is peculiar, and is evidently taken from that shown in Drury's report; but it should be noticed that the other contemporary drawing (Fig. 391) shows this tower as a plain square keep, with flat top, of the form universally adopted at that time in Scotland.

In 1573 Elizabeth sent a force to the Regent's assistance under Sir William Drury, who opened five batteries against the Castle, and in nine days almost completely demolished the eastern front, including David's Tower and the Constable's Tower, so that "the ruins ran like a sandy brae" and choked up the well, and so compelled the garrison to surrender.

The ancient Castle was almost completely destroyed during this siege, and it is from the date of the rebuilding of the Castle by the Regent Morton after the siege that the existing modern Castle, whose appearance is so familiar, begins.

We shall therefore now proceed to describe the various buildings as we find them, with reference, where possible, to those which preceded them.

Commencing at the Esplanade, it should be kept in mind that its present extended appearance is of very modern date, having been formed with the rubbish removed from the site of the Royal Exchange, when it was built in 1753. Before the siege of 1573 this ground was at the level of the bottom of the dry ditch, and was occupied with a triangular court bounded by a wall about 20 feet high, called the "Spur," above alluded to in Drury's report and plan. This was removed in 1649, being considered a bad defence, and requiring too many men to hold it.

The Spur is shown on Dr. Chambers's restoration (Fig. 392), and also on Gordon's map of 1647 (Fig. 393). Gordon's map likewise shows the position of the city wall in connection with the Castle. The first wall was built in 1450. It commenced at the Wellhouse Tower (the remains of which still exist, see Fig. 388) on the north side of the Castle, and ran for some distance along the south side of the Nor' Loch, then, turning at right angles, it ran southwards and crossed the Castle Hill at the east end of the Esplanade, where there was a gate, called the Barrier Gate. It is supposed that the Castle was supplied with water from the Wellhouse by ladders, etc., communicating with a rock-cut stair at a high level leading to "Wallace's Tower" (which Wilson considers a corruption of Wellhouse Tower), a fragment of which may still be seen, and from the style of its masonry seems to be very old.

There was also a sally-port at this point, adjoining the Wellhouse Tower.

In the Rolls for 1361 there is a payment of £160 for the construction of a well and "turris fortis." This was no doubt the well at the Wellhouse, and the "turris" is probably the tower called Wallace's Cradle, or it may have been the original Wellhouse Tower.

In 1381, Robert II., wishing to have a good water-supply within the walls, searched for and discovered the ancient well, and restored it at a cost of £95.

After the removal of the Spur, and before the formation of the Esplanade, the Castle was approached by a narrow raised roadway, and a drawbridge at the gateway. This is shown on a drawing (from Maitland's *History of Edinburgh*) by T. Sandby about 1750 (Fig. 389).

Before entering the Castle let us look at the Half-moon Battery, the chief feature erected by the Regent Morton after the surrender of the Castle. David's Tower is supposed to have stood about the centre of it, and the remains of one of the smaller old towers and part of the curtain wall may be traced imbedded in the masonry of the present building. This is also shown in Sandby's view (Fig. 389).

Immediately within the drawbridge there was formerly a highly ornamental gateway, which was removed early in this century, being

found too narrow for modern vehicles. On the lintel there was a basso-

Fig. 393.—Edinburgh Castle. From Gordon's Map, 1647.

relievo of Mons Meg and other pieces of artillery, part of which is pre-

served over the entrance to the Ordnance Office, and part is in the Antiquarian Museum.

We next come to the arched gateway, built by the Regent Morton, below the site of the Constable's Tower. This building is shown on Gordon's map and Sandby's view, but it had then a flat crenellated roof for artillery, the present top story being a modern addition. The archway was very strongly defended with three gates and two portcullises. The mouldings quite correspond with those of the period (1574) (Fig. 394), as at Aberdour and Drochil Castles, both built by the Regent Morton. In the oblong panel formed by two Ionic pilasters over the arch, there were originally the Royal arms, and in the entablature alternating with the triglyphs may be seen the heart and star of the Douglas. The author of the *Historie of King James the Sixt* accuses Morton of disloyalty in thus purposely placing his own arms above the Lion of Scotland. The Royal arms are said to have been removed by Cromwell, and the inscription chiselled out from the stone below.[1]

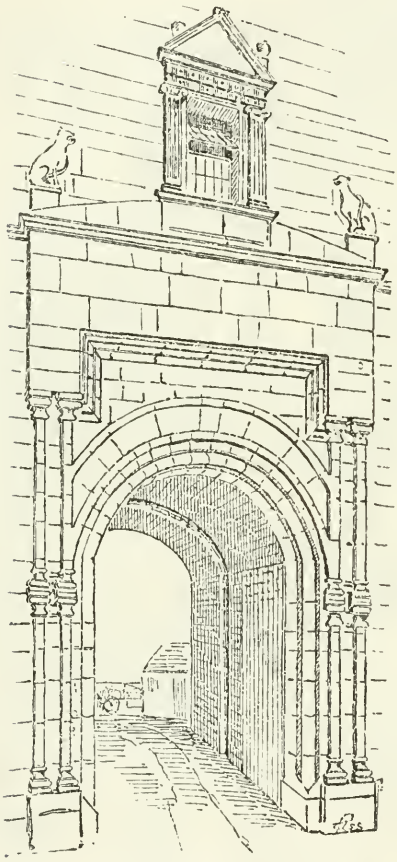


Fig. 394.—Edinburgh Castle. Regent Morton's Gateway.

It is frequently said that the upper room in this tower was used as a State prison, and that both the Argylls and many others were confined here before their execution.

On passing through the archway a flight of steps is seen on the left,

[1] Mr. Blanc informs us that he has ascertained from inspection of the walls that this building seems to be a part of the work executed in the time of King David II., the walls being more massy than those of any other part of the Castle, viz., 10 and 20 feet thick. He says: "The west face is rough rubble of early character. During the siege of 1573 the east and north fronts would be injured, which would necessitate repairs afterwards. Morton seems therefore to have veneered them with ashlar, and introduced a new moulded gate front, with contemporaneous detail." It should however be noted that the archway through the tower, with the portcullis grooves, and the vaulted room above which contained the apparatus for working the portcullises, are also of the Regent Morton's time. The great thickness of the walls of the gate tower at Borthwick shows that such buildings, after the introduction of artillery, were usually built with very thick walls.

indicating where the original access to the upper platform by the Constable's Tower probably was.

Advancing further we pass on the right the Argyll Battery, and see before us the Governor's house, built in Queen Anne's time, and a passage flanked with two quaint vases leading to the Armoury and Stores. These small plain buildings are of the eighteenth century.

The great block containing the soldiers' barracks was built at the beginning of this century. The position of these buildings on the Castle rock may be seen by reference to the plan (Fig. 388).

In Gordon's view the ground occupied by these buildings is shown as entirely open, with only a battery of two guns at the west, and other two guns at the south-east corner.

It will be observed that the walls of the enceinte on Gordon's plan are quite different in form from those of the views before the siege (Figs. 391 and 392). They are broken, with re-entering angles and bastion-shaped projections adjusted for mutual defence in a manner such as might be expected to be erected about the end of the sixteenth century.

We now ascend to the upper platform on which the principal parts of the Castle have always stood. Commencing with the quadrangle or Palace yard, we find the oldest portions at the south-east corner, immediately over the most precipitous parts of the rock. These consist of the private apartments of the Palace, already referred to as belonging originally to the fifteenth century. Dr. Chambers thinks he can trace the remains of an ancient tower at the south-east angle, which may have been the primitive palace of Malcolm Canmore; but as we have seen that the Castle was entirely dilapidated at the time of Bruce, we cannot fix on an earlier date than that of the Jameses for the building of any part of this palace.

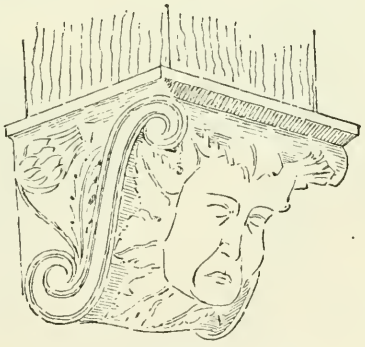


Fig. 395.—Edinburgh Castle. Corbel in Staircase of Parliament Hall.

The breadth of the platform of the courtyard seems to have been widened at an early date by building extensive vaults to the southwards, in some places two stories in height, so as to raise the pavement of the courtyard to near the top of the wall of enceinte. Above part of these vaults the great hall, called also the Parliament House, was erected, apparently at a subsequent date, for it should be noticed that the hall does not occupy the full width of the vaults, its north wall being partly built on the arches of the vaults, which extend further northward under the pavement of the courtyard.

The hall is 84 feet long by 33 feet wide, and seems to have been

originally lighted by large mullioned windows on the south side, some traces of which still remain (see Fig. 393). There were probably similar windows on the north side, but the building has been so much altered that it is now scarcely possible to recall any of its original features. The gabled crow-steps which still remain on the west gable are evidently original. The roof of the hall is old. Of the corbels which supported the ends of the principal rafters only one (Fig. 395) is now visible in the staircase, the others having been either destroyed or covered up by the floors which have been inserted in order to convert the hall into a modern hospital. From openings recently made in the floors, it has

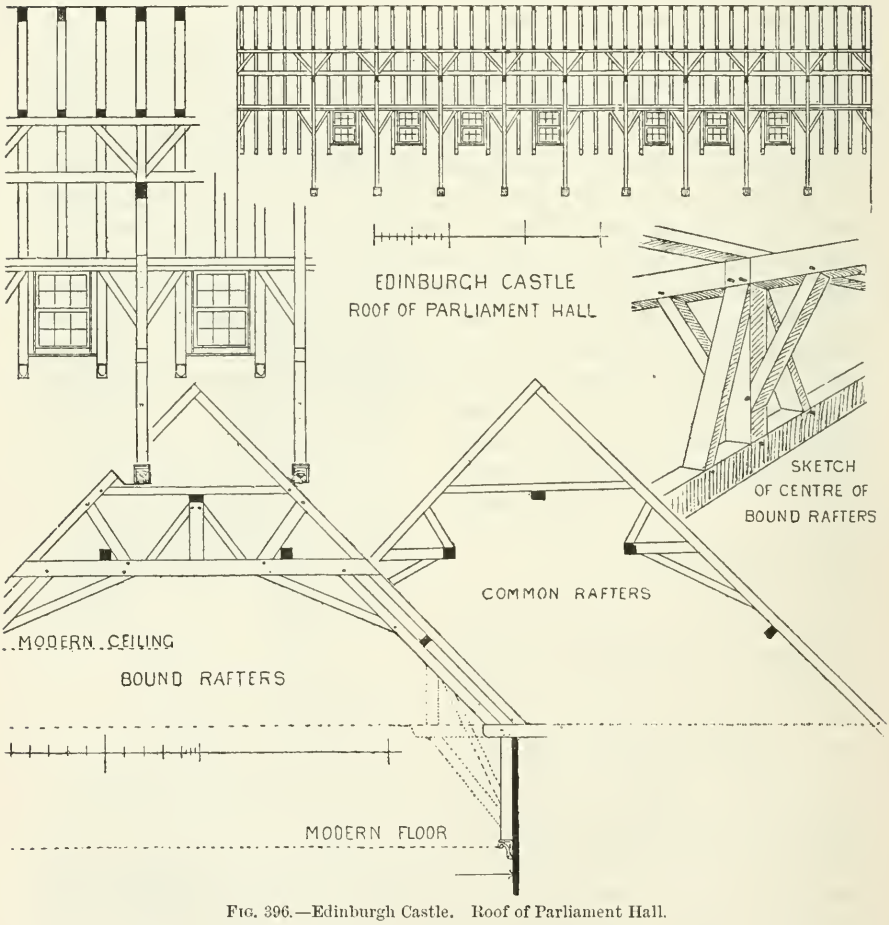


Fig. 396.—Edinburgh Castle. Roof of Parliament Hall.

been ascertained that some of the corbels are still preserved, and are similar in design to the one in the staircase. These corbels are of good Renaissance design, and of a style very rare in Scotland. They

and the gabled crow-steps are almost the only original features left in the building from which an idea of the date of its different parts may be formed. Judging from these and the parapet on both sides, the date of the roof and upper part of the building can scarcely be earlier than the reign of James v. Some good specimens of similar early Renaissance work at Stirling belong to that date, and are probably the work of French artists brought over by King James. The hall, as above pointed out, was begun by James I., and seems to have been roofed about 1438. But this may have been a plain roof, and at a later date a finer roof may have been desired, when that still existing was probably erected, and the corbels to receive the ends of the principal rafters were inserted.

From the sections (Fig. 396) it will be seen that the design is not a good specimen of carpentry, and it may be observed that the thrust of the roof has forced the south wall considerably off the perpendicular. Fig. 397 shows the present appearance of the roof as plastered over. But there can be no doubt that when seen in its entirety this must have been a magnificent hall, of a similar type to those of the other Royal palaces at Linlithgow and Stirling; and it is satisfactory to know that the persevering endeavours of Major Gore Booth and others to have it so far as possible restored and fitted up as an armoury and military museum, are likely to be crowned with success.

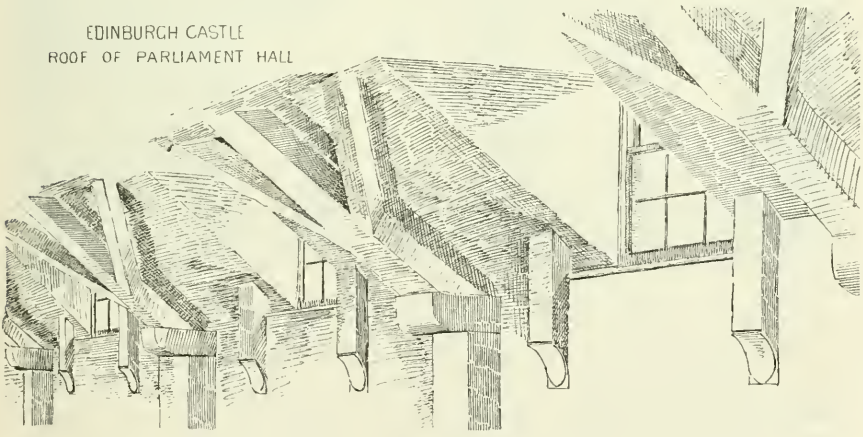


Fig. 397.—Edinburgh Castle. Present appearance of the Roof as Plastered over.

According to the usual arrangement of such palaces, the hall communicates with the Prince's private apartments at one end—in this case the east end; but these have also been so much altered that it is impossible to distinguish the original arrangements.

The vaults beneath this range are said to have been used as State prisons, one being called Argyll's Dungeon. At all events there is no doubt that they were employed for the purpose of confining the French

prisoners at the beginning of this century. Owing to the sudden fall of the rock at the west end, these vaults are partly two stories in height. The original parapet walk along the top of the wall still remains outside the wall of the hall, and gives access to these vaults.

The vaults beneath the hall and other buildings have recently been carefully explored by Major Gore Booth, with the result that the kitchen seems to have been situated on the basement floor at the west end of the hall, and communication between the two was obtained by means of a staircase, long built up, but still partly existing.

Fig. 398.—Edinburgh Castle. View of East Side of Courtyard.

We now proceed to the east wing of the Palace (Fig. 398). Here are the apartments occupied by Queen Mary, and the room in which King James VI. was born. This wing was renovated in Queen Mary's time. Over the entrance doorway (Fig. 399) there is a monogram of M. and H., for Mary and Henry Darnley, with the date 1566, besides a shield higher up containing the Royal arms. From the style of this doorway, and the panel above, it is however very doubtful whether they belong to Queen Mary's time. We think it much more likely that they were inserted by her son as a memorial of his parents and his own birthplace, at the time when other alterations were carried out during his reign, as indicated by the date (1615) over the doorway to the staircase in the central turret (Fig. 400). This date is shown in this position on

the drawing for convenience. It belongs to the same building, and indicates when it was erected, but its real position is on the north eleva-

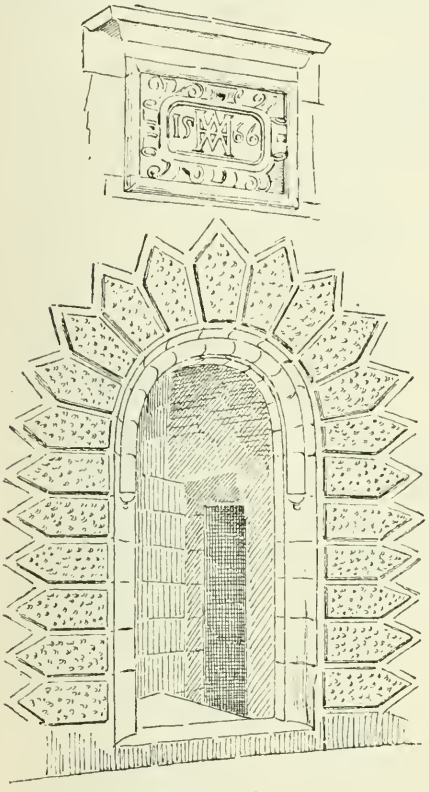


Fig. 399.—Edinburgh Castle. Entrance to Queen Mary's Room.

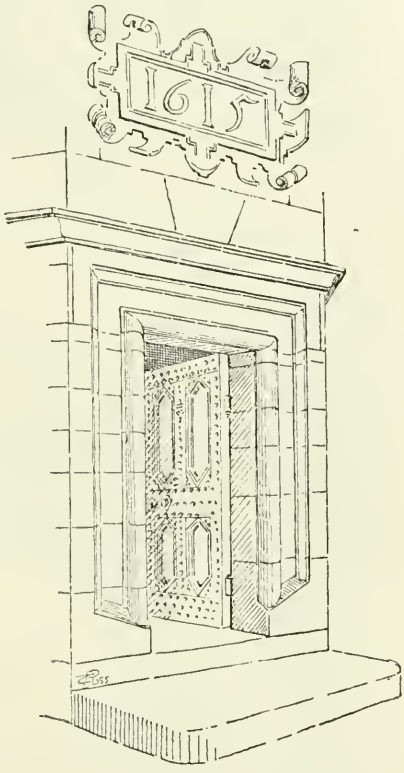


Fig. 400.—Edinburgh Castle. Doorway to Staircase Turret.

tion, shown on the left-hand side of Fig. 398, and is referred to further on. The whole of the east elevation of the courtyard (shown in Fig. 398) is built with fragments from old buildings, and is entirely a thing of shreds and patches. The upper part of the tower above the roof is modern.

The two corbelled projections opposite the eastern windows of this division are noteworthy. It is said that they supported balconies, to which access could be got from the windows, but it seems probable that they were originally intended to support oriel windows, such as that in the private apartments at Linlithgow, which was of a similar character (see Linlithgow). The oriels however not having been completed, the projecting bases were utilised as balconies, the holes for the iron railings of which are visible in the window rybats. A somewhat similar balcony exists at Crichton Castle.

The corbels of the original parapet on the exterior of the cast front show, as already mentioned, that the building was formerly a story lower

than now, the heightening having apparently been done subsequently to the time of Gordon's map in 1647. Dr. Chambers gives reasons for believing that the upper floors of this building were used as State prisons in the eighteenth century.

The northern part of this wing is in fair preservation, and, as above mentioned, bears the date 1615, with which date its style corresponds, being somewhat similar to that of Heriot's Hospital and the Old Parliament House. The mouldings and other details (Fig. 401) have not escaped from the effects of the subsequent sieges by Cromwell and others, to which the Castle was subjected; but as none of these were of a very serious character, the buildings erected after the date of the Regent Morton have suffered more from violence from within than from without. This block contains the Regalia Room, which appears to have been constructed as a strong-room for keeping these insignia in safety. The vaults below the east wing seem to be ancient, and to have survived Drury's siege, more modern buildings having been erected partly on the top of them.

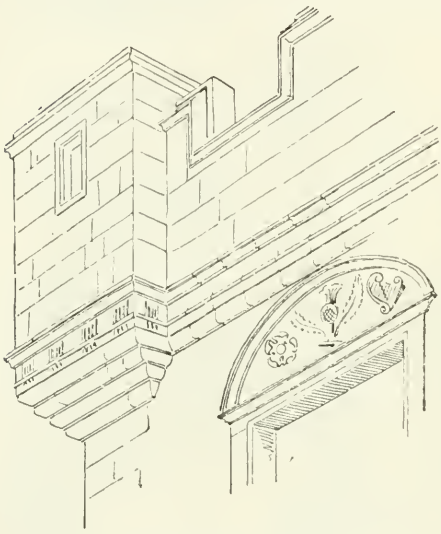


Fig. 401.—Edinburgh Castle. Details, East Side of Courtyard.

On the north side of the quadrangle stood originally the Garrison Church, founded as early as the time of David I., but it seems to have been rebuilt shortly before 1366, by David II., as there is an entry of payment of £10 to the chaplain of St. Mary's Chapel, newly constructed. This chapel was dedicated to St. Mary, and was quite distinct from St. Margaret's Chapel. Maitland describes it as a very long and ancient church, and as being in his day used as a magazine and armoury. Its appearance in 1750 is seen in Sandby's view (Fig. 389), the gable appearing over the centre of the Half-moon Battery. As the block of buildings now stands, it is a specimen of the handiwork of the late R. W. Billings.

The buildings on the west side of the courtyard are evidently very modern, probably about the beginning of last century, and contain nothing of importance architecturally.

We now pass to the northern portion of the upper platform, on which the little Chapel of St. Margaret has stood uninjured through all the various shocks and changes which have so altered all the other features of the Castle. But it has suffered severely at the hands of those

in charge of the Castle, having been at one time divided into two stories, with a floor let into the masonry, so as to convert it into a powder-magazine. Some years ago, however, it was revealed by Professor

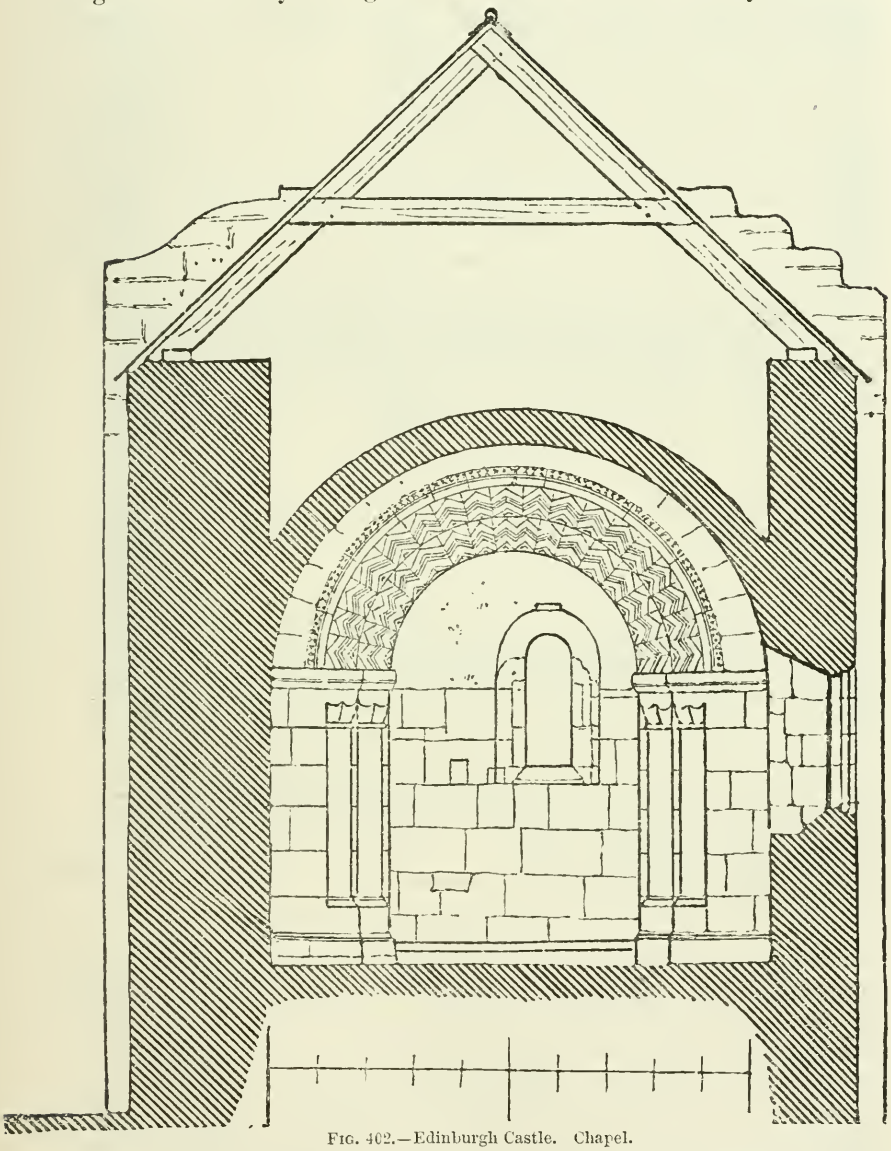


Fig. 402.—Edinburgh Castle. Chapel.

Daniel Wilson, and was fortunately rescued by the efforts of the Antiquarian Society of Scotland from this unworthy fate, and restored to its original shape and use, and we understand that through the munificence of Mr. William Nelson, a distinguished citizen of Edinburgh, it is about

to be entirely restored to its original form, under the superintendence of Mr. Hippolyte J. Blanc, architect.

The illustrations of the chapel (Figs. 402, 403, and 403B) are from very careful drawings, made by Mr. Blanc. The building is one of the most unique and interesting specimens of Norman work in Scotland. It consists of a chancel with a circular apse to the eastward, separated from the chancel by a wall pierced with an enriched Norman arch. The total length of the interior is 27 feet 9 inches, that of the chancel being 16 feet. The side walls of the chancel are not parallel, the width being 9 feet 9 inches at the west end, increasing to 10 feet 6 inches at the east end. This, which would not be perceptible in a large building, is here quite apparent, where the dimensions are so small. The apse is

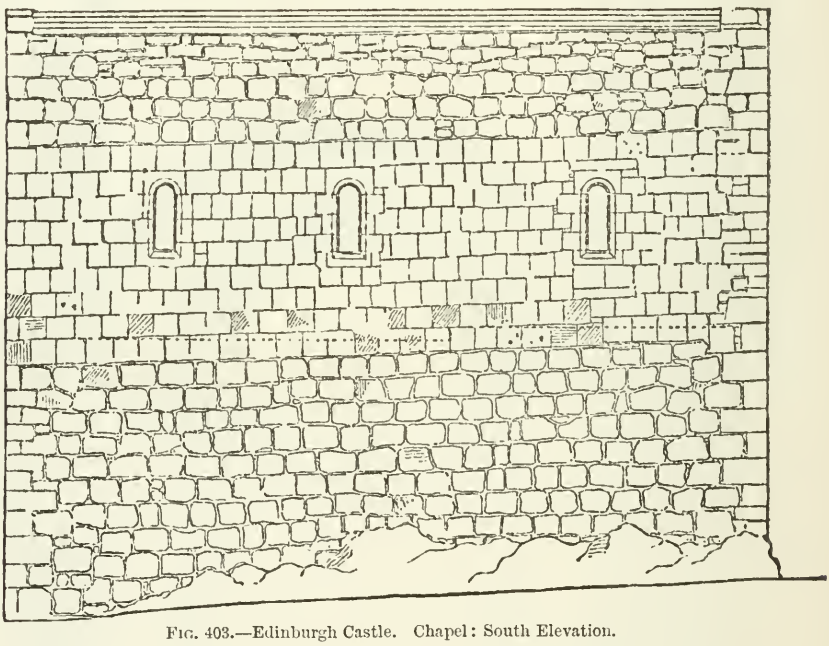


FIG. 403.—Edinburgh Castle. Chapel: South Elevation.

remarkable from its being circular internally and square externally, an arrangement very uncommon in this country, but of which examples occur in the south of France. It will be observed from the south elevation (Fig. 403) that the external masonry is not of the same style of workmanship throughout. The central part where the windows occur is, according to Mr. Blanc, the oldest, and originally rested on the rock, which having at a later time been lowered and partly cut away, rendered necessary the facing of masonry which has been inserted beneath it. The upper part of the wall (see section, Fig. 402) rises clear above the vault, and thus has no influence on the chapel inside, and may therefore be of a much later date.

The porch forming the entrance to the chapel (shown on Plan, Fig. 403B) is modern.

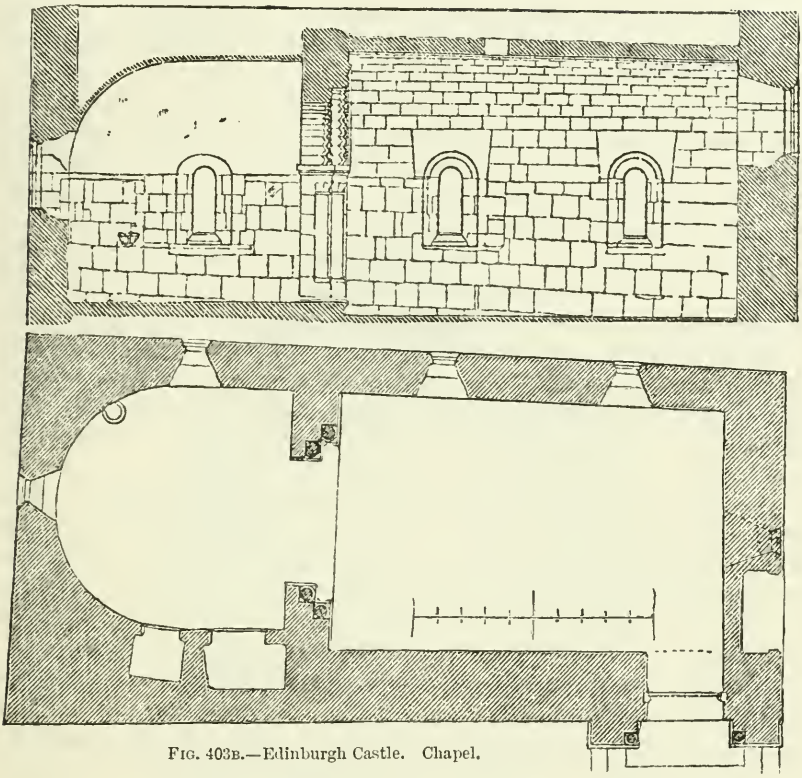


FIG. 403B.—Edinburgh Castle. Chapel.

Adjoining the chapel is the battery named after the celebrated cannon "Mons Meg," which is there preserved. This gun (contrary to the legend on the carriage) is said by Wilson and others to have been made by the M'Lellands in Kirkcudbrightshire, and by them presented to James II., when he went to besiege Threave Castle, belonging to Earl Douglas, in 1455. The story goes that the gun was made at a place called Mollance in Kirkcudbrightshire, hence the name Mollance Meg, corrupted into Mons Meg.

But this story has in its turn been called in question. Mr. Burnet, the Editor of the Exchequer Rolls, thinks it very unlikely that any country smith in Kirkcudbrightshire would have the necessary skill and appliances for the manufacture of such a piece of ordnance. He refers to several entries for the expenses of conveying the guns, especially for one gun called the King's great Bombard, from Linlithgow to the siege of Threave Castle. It also appears from the Rolls that the King imported his bombards from Flanders, and it seems most likely after all that Mons Meg is of foreign extraction.

STIRLING CASTLE.

The Castle of Stirling, which occupies so important a place in connection with the civil history of Scotland, is of no less interest in connection with the architectural history of the country.

The first occupation of the Castle rock as a place of strength is of unknown antiquity, but the naturally strong site must have pointed it out at an early period as a suitable position for a stronghold, and it was no doubt originally crowned by a hill fort similar to those so frequently found on the tops of heights in this and other parts of Scotland.

The value of the site in a strategic point of view, forming as it does the key to the passage from the Lowlands to the North, would probably also be soon discovered, and would tend to make its careful fortification a matter of great moment, particularly at the time when the country north of the Forth formed a separate kingdom from that of Lothian, south of the river. The original walls of mixed stone and earth, with their surrounding ditches, would then probably be of unusual height and depth.

In the twelfth century the Castle of Stirling was considered a place of great importance. Stirling, along with Edinburgh, Roxburgh, and Berwick, formed the four chief fortresses of the kingdom, which were pledged to England for the payment of the ransom of William the Lion, who fell into the hands of the English in 1174, but these castles were afterwards restored to the Scots, along with their King, by Richard I.

We have no information as to when walls of stone and lime were substituted for the primitive ramparts, but we find that the Castle of Stirling was amongst the strongest in the kingdom at the time of the invasion of Edward I. It was then surrounded with high and strong walls, which enabled the garrison, in 1304, to offer an obstinate resistance to all Edward's means of attack, and to keep his army at bay for several months with a garrison which finally consisted of only twenty-eight men. The account of this siege, like that of Caerlaverock Castle, also undertaken by Edward, shows how inferior the means of attack at that time were to those of defence. Being unable to reduce the Castle with the stones hurled against it from his catapults, the King ordered the roofs of the Churches of St. Andrews and Dunfermline to be stripped of their lead coverings in order to obtain the means of making heavier balls to be launched against the walls from his engines.

It seems doubtful whether any part of the walls existing at that time can now be traced, but the present walls are probably in great part on the old foundations. The oldest part appears to be that adjoining the postern (Fig. 404) at the north-east angle. The arch of this postern is certainly of old date, and, together with the steep vaulted passage passing below the buildings, and ascending to the upper platform of the

Castle, forms a picturesque and interesting feature of the structure. The most ancient buildings appear, as usual, to have been on the highest point of the rocky site, situated at the north-west angle of the inner courtyard (Fig. 405), where the rock is about 250 feet above the level of the plain.

The Castle first became a Royal residence after the accession of the Stewarts. James II. was born and frequently resided there.

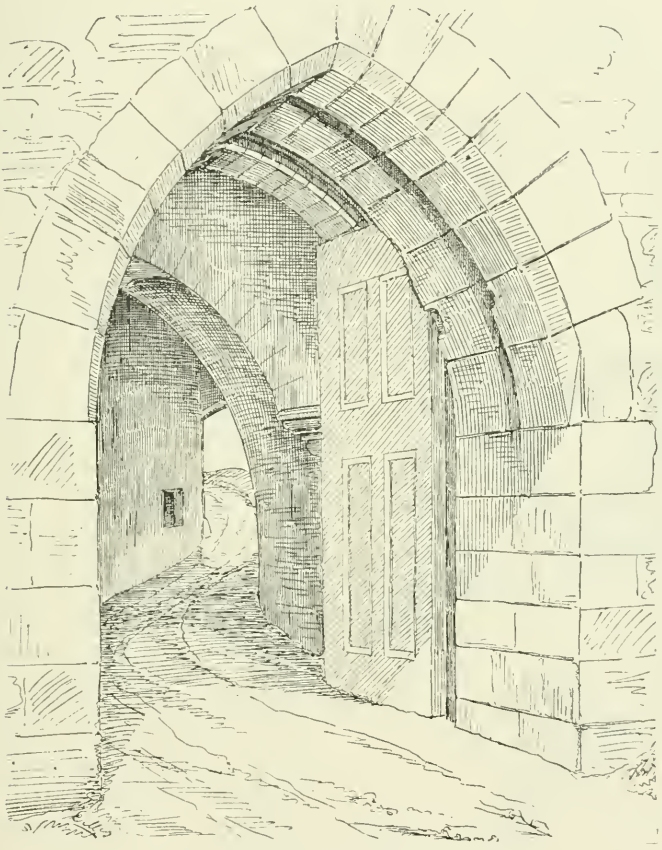


Fig. 404.—Stirling Castle. North-East Postern.

The Royal residence stood at this time at the north-west angle. There Douglas was induced to visit the King, and there met his doom. The buildings now called the "Douglas Room," etc., are modern, but no doubt occupy the site of the original castle or keep, and possibly contain some of the original walls. The inner court was probably the space now occupied by the courtyard, bounded on the south and east by the Palace

and Parliament Hall, while the latter buildings were erected in what was the outer courtyard of the Castle. These are now the most interesting portions of the buildings, and date from the times of James III., James IV., and James V.

The Accounts of the Lord High Treasurer of Scotland, 1473-98, edited by Dr. Dickson, of the General Register House, throw a good deal of light on the dates when some of these buildings were erected. Thus we find a payment made on 8th June 1496 to Walter Marlyonne, mason, "in erlis of his condiciun (or contract) of biggin of the king's hous," which probably marks, as Dr. Dickson observes, the commencement of the erection of the Palace, generally assigned to the reign of James V.

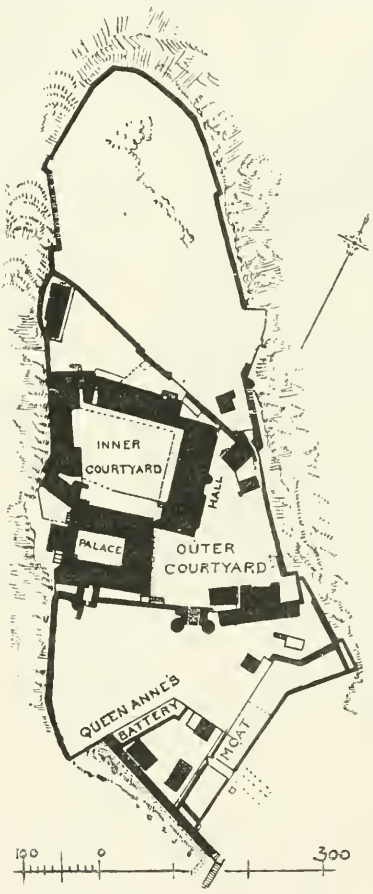


Fig. 405.—Stirling Castle. General Plan of Castle (from the Ordnance Survey).

This contract was undertaken by Walter and John Merlioun, under the direction of Sir Thomas Smyth, a Churchman, as Master of Works.

He was succeeded in 1496–97 by the Abbot of Lindores (who was also Keeper of the Palace of Linlithgow), and in the end of the same year by Sir W. Betoune and Andrew Atoune. On one occasion the Master Mason is sent for from Linlithgow to "gif his devis to the werk." There are numerous entries of payments for the works, but they are not sufficiently detailed to enable the different parts of the building to which they apply to be identified. At the same period (1490–1503) there was considerable outlay in connection with the formation of a large garden on the south side of the Castle. There can thus be no doubt that the erection of the Palace and the general improvement of the Castle were begun by James IV., although probably they were chiefly erected under the reign of his son. The Parliament House, however, situated on the east side of the quadrangle, is evidently, from its style, of a somewhat earlier date than the Palace, and may reasonably be assigned to the time of James III.

James III. is also said to have built a chapel on the north side of the quadrangle, "which," says Grose, "he largely endowed, and procured to be made collegiate." This chapel was pulled down by James VI., in order to erect on the site the existing chapel for the baptism of his son, Prince Henry, which took place there with great pomp and ceremony in 1594.

The outer bailey was enclosed with the wall, part of which still remains, and in which is situated the entrance gateway, flanked by two round towers. To the west of this is the basement of another round tower, which was standing when Slezer made his views of the Castle, about 1690. This outer gateway, wall, and towers are probably the work of James III.

Outside of the above entrance gateway other works have been added at different times. The battery to the east, which commands Stirling Bridge, is said to have been erected by Mary of Lorraine, and is still called the "French Battery." The other works connected with the outer gate were built under Queen Anne, whose initials they bear. These are of some interest as being, we believe, along with the fortifications of Berwick-on-Tweed, the only specimens of batteries of this description north of the Tweed. The walls are of great thickness, and are provided on the top with embrasures for guns, lined with ashlar, while the parapet is formed of earthwork, and covered with turf. The platforms for working the guns are broad, and are supported on arches, forming casemates. Several of these are designed as flanking works, and are provided with loopholes for cannon. We also find here the peculiar watch-turrets or sentry-boxes of stone which distinguish the period. Similar watch-turrets are conspicuous objects on the walls of Edinburgh Castle.

The Parliament Hall (Fig. 406), as above mentioned, is the most ancient part of the existing buildings, with the exception of the tower at the south-west angle of the Palace, and of some of the walls of enceinte, and other walls now concealed by more modern buildings. The general design of this hall corresponds with that of the English halls of the period, having two large oriels at the south or dais end of the hall, and having originally an open timber roof (now removed). The hall is 125 feet long by 36 feet 6 inches wide. The oriels were roofed with groined vaulting, and that of the west window is still preserved. The hall enters from the level of the inner court, but has a story below that level towards the outer court on the east. The lower floor is vaulted, and divided into a number of apartments, which were used as kitchen offices, guard-rooms, etc. A turret stair on the east side leads from the ground to the roof, with a door communicating with the hall on the upper floor.

The principal entrance to the hall was from the inner ward on the west side, where there has been a covered way or cloister extending along that side of the building. Some of the corbels which supported

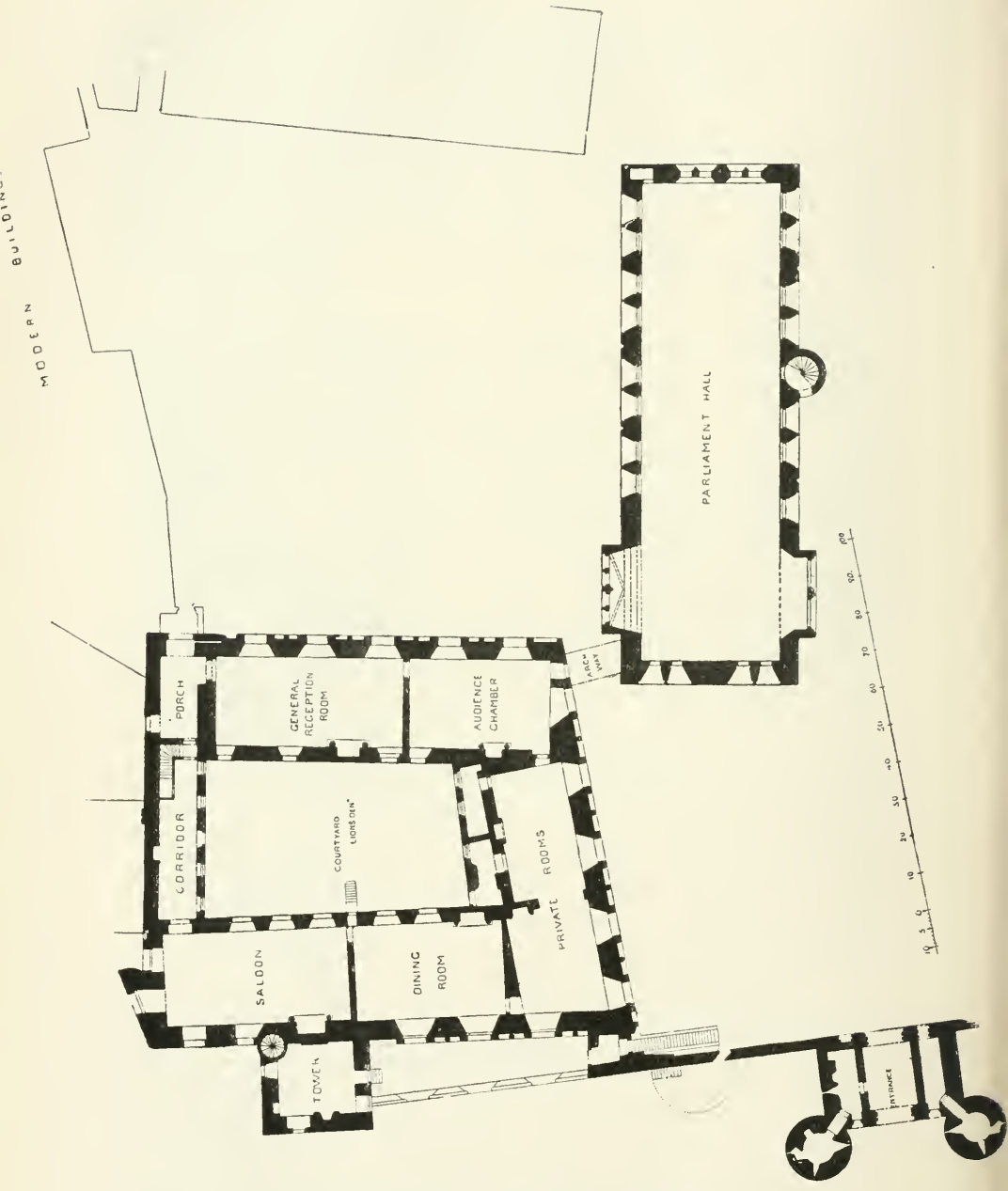


FIG. 406.—Stirling Castle. Plan of Palace and Parliament Hall.

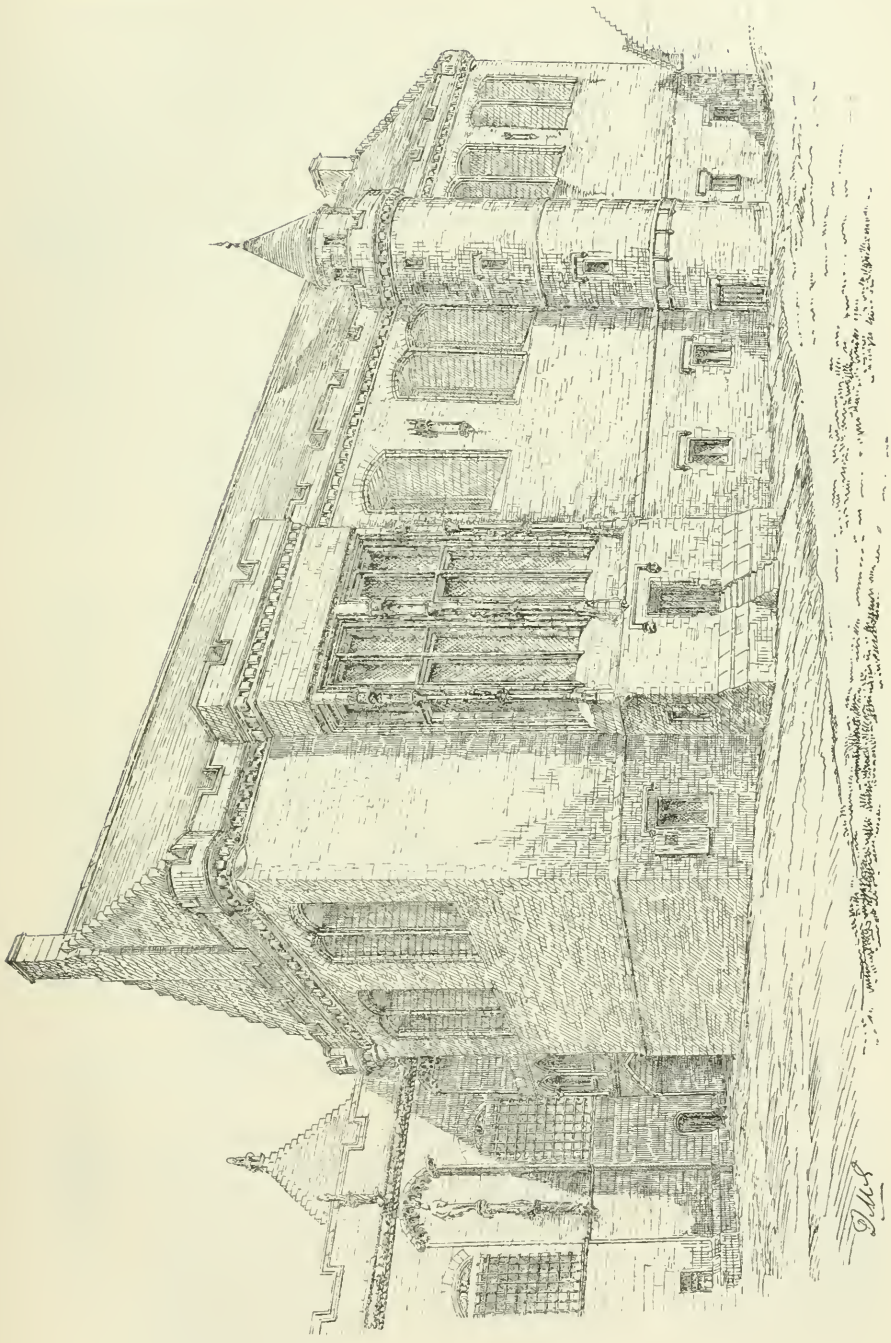


Fig. 407.—Stirling Castle. View of Parliament Hall from the South-East.

the wall-plate of the roof of the corridor still remain, but it is difficult to determine what was the nature of the corridor. It was however very likely an arcade of masonry, supporting a wooden roof. Similar corridors exist, or have existed, at Castle Campbell and St. Andrews Castle. This structure necessarily curtailed the height of the windows on this side, but those on the east side were of greater height. The external wall spaces between the windows were relieved with canopied niches containing statues. The mutilated remains of the niches and canopies may still be traced (Fig. 407).

These side windows and niches have unfortunately been very much destroyed in consequence of the various alterations the building has been subjected to, the original noble hall having been divided into several floors, and staircases and partitions having been introduced so as to convert it into modern barracks. The original roof, which was of fine open timber-work, has also disappeared, and a modern roof has been substituted.

Grose speaks of the Parliament Hall as being "very high, with a timbered roof," when he visited it in 1797. The removal of the ancient roof, and the insertion of the floors and staircase, seem thus to have taken place about the beginning of this century.

The two oriels have suffered less than the other parts of the building, and all the elaborate and beautiful details of their architecture, that on the east being especially fine, can be quite distinctly made out, as the annexed illustration shows (Fig. 408). The flat segmental arch over the windows on each side, and at the south end of the hall, and the very deep external bay of these windows, are remarkable features. A similar deep bay may be observed in many of the windows in Linlithgow Palace, and at Crookston and Niddrie Castles. The cornice and parapet, with the angle bartizans shown in the general view (Fig. 407), are partly suggested restorations; but for these the data are obtained from Slezer's views, which show that the gables had crow-steps and angle bartizans, and that the eastern staircase turret had a conical roof in his time (1693).

It will be observed that the whole character of the work at the Parliament Hall is of a decidedly earlier style than that of the Palace. It is, in fact, purely Late Gothic, while, as we shall see presently, the Palace has a distinct feeling of Renaissance in its details.

It would therefore appear that the usual tradition which ascribes the hall to James III. is probably correct.

Tradition is, however, not quite so accurate as regards the entrance gateway, which is popularly said to be of Norman date. The style of this gateway is undoubtedly the same as that of the hall (Fig. 409). The mouldings of the doorways, and the hood mouldings over the doors and windows, are all of the same period as those of the hall. In Slezer's time the two round towers had projecting battlements supported on corbels, and were finished with a smaller turret above with a conical roof, in the

Fig. 408.—Stirling Castle. South Oriel of Parliament Hall.

style of the gateway at Falkland, and the north-west portion of Holyrood.

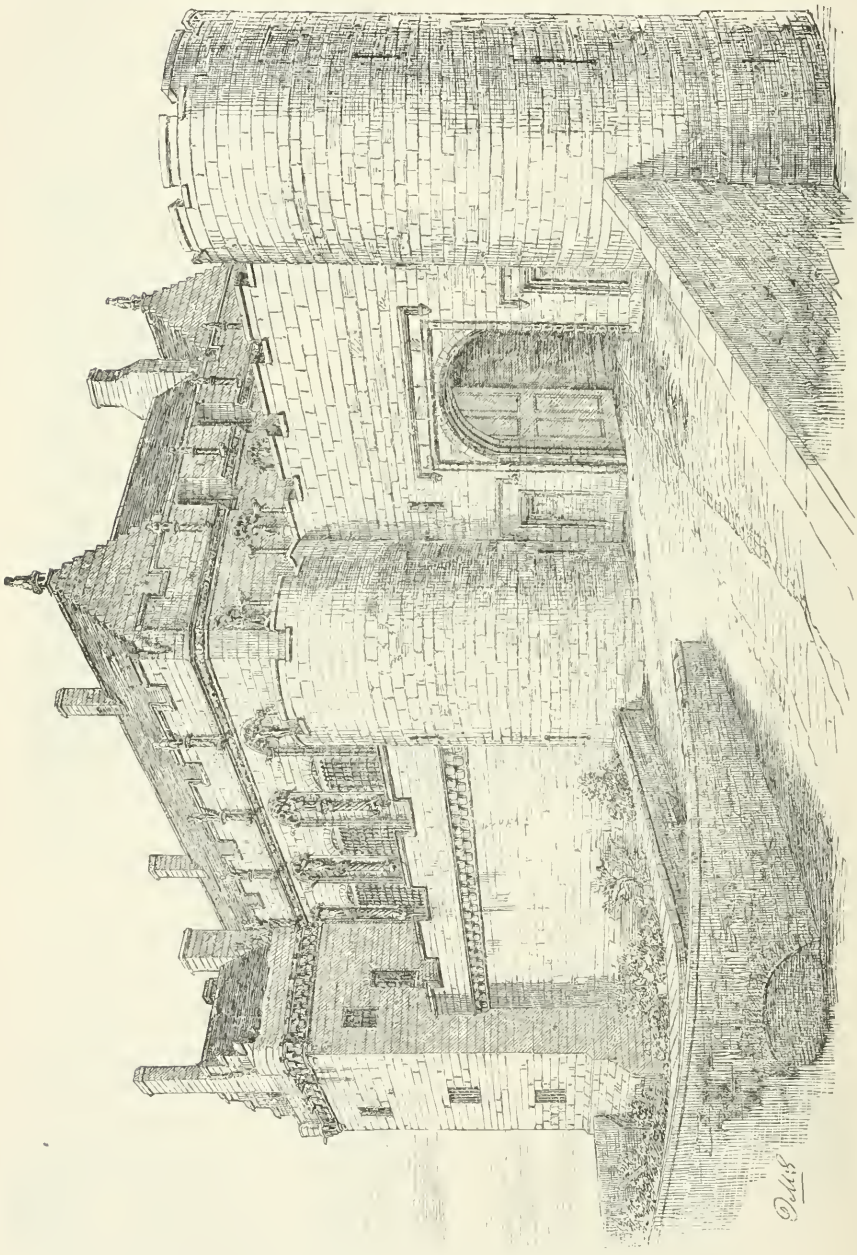


FIG. 409.—Stirling Castle. Entrance Gateway and Palace from the South-East.

The towers were afterwards considerably demolished, and their upper part

with the battlements, is modern. This gateway contained three entrances —a wide central one, and a narrow passage for foot-passengers on each side.

The central gateway was provided with a portcullis and folding gates at both the outer and inner archway. The entrance passage was vaulted, and there was a room above for working the portcullis. The side entrances seem to have been provided with a portcullis as well as strong doors at both the inner and outer archways. The inner doorway of the eastern passage still preserves the groove for the portcullis, while that on the west side is built up. Both passages are in connection with the round towers adjoining, which formed guard-rooms. The passage on the left on entering has been at a subsequent time converted into a guard-room with a fireplace, and a doorway opened from it into the central passage. The east and west towers are provided with long loopholes commanding the entrance. These towers, both in their general construction and in the form of the loopholes, bear considerable resemblance to the outer round towers at the north-east angle of Linlithgow Palace. The latter are sometimes attributed to the time of Edward I., but they have no features which specially connect them with that period, while their general character and the buildings to which they are attached rather point to their being of the time of James III.

The Palace lies to the south-west of the hall, and forms a complete square, with central courtyard. It approaches within 13 feet of the hall, with which it was probably connected by an archway and covered passage, but the present covered archway is modern. The courtyard is 67 feet by 40 feet, and is known as the "Lions' Den," the tradition being that James IV., who was fond of wild animals, kept his lions there. These animals were kept by the King as an emblem of royal state and dignity.

The Palace enters from the south-west angle of the inner ward, on the level of the upper floor, where there are a porch and the original doorway, with a sliding bar. This porch gives access to an inner lobby, from which a large apartment opens on the left. This was probably a general reception-room, leading to an inner hall or audience-chamber, and to the King's private rooms beyond. From the entrance lobby a corridor runs along the west side of the quadrangle, lighted with windows towards the courtyard. It has been intended to construct rooms to the west, entering from this corridor, but this has never been carried out. The corridor conducts to a suite of apartments running along the south side of the quadrangle. These appear to have been the more private reception-rooms of the Palace. The first entered may have been the "salon" or drawing-room, and the next the dining-room, the rooms on the east side of the square forming the private apartments of the Royal Family. The apartments of the Palace were all richly carved and decorated, the

ceiling of the "presence-chamber" being adorned with carved oak panels representing the heads of Wallace, Bruce, and other Scottish

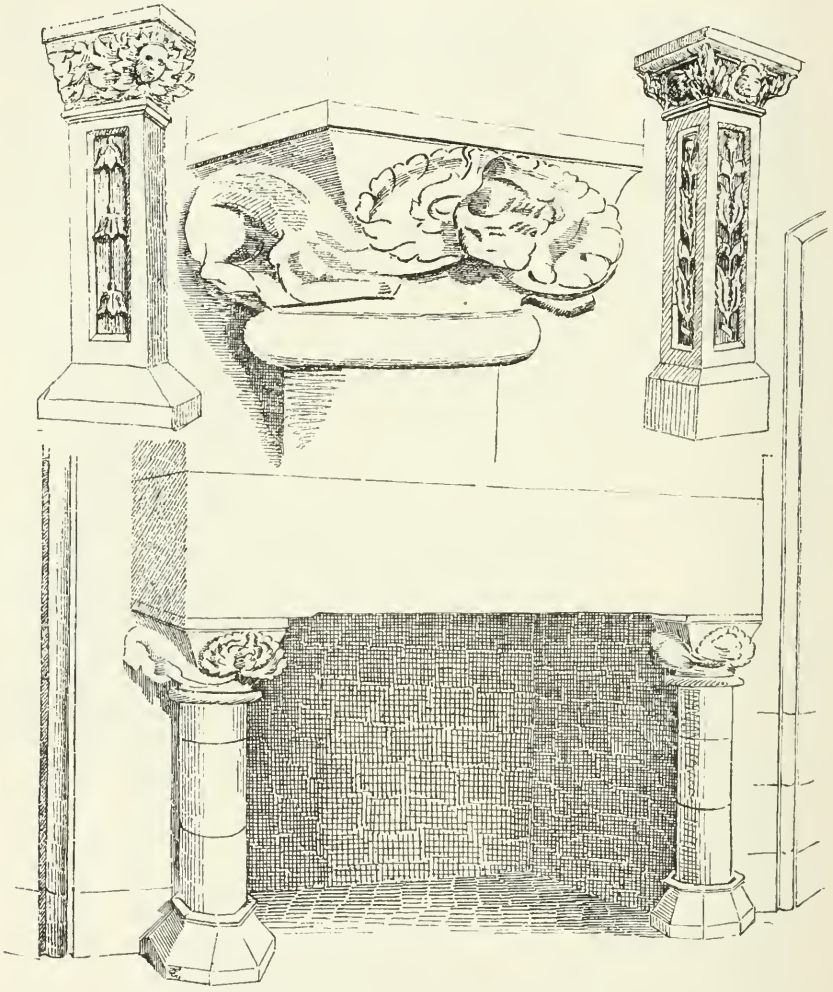


Fig. 410.—Stirling Castle. Details of Fireplaces in Palace.

kings and worthies. These were all removed in 1777, as some of them had fallen through decay, and unfortunately were much damaged and dispersed. But some of them are still preserved in the Smithsonian Institute in Stirling, and in the Antiquarian Museum in Edinburgh, where there are two of the original heads, and copies of several others.

The fireplaces, of which some examples are given in Fig. 410, are almost the only portions of the internal ornamentation remaining, and even these are much injured and defaced. They are executed in free-

stone. The two upper jambs in the sketch are distinctly Renaissance in design, and have a striking similarity to the fireplace of "Queen Mary's Room" at Linlithgow, leading to the inference that the same hand may have been engaged on both these buildings.

The basement floor is now so filled with stores and difficult of access that the use of each portion cannot be distinctly ascertained. The apartments are all vaulted, and seem to have been chiefly cellars, but the rooms on the south side, where the aspect is open, were devoted to the kitchen, and offices connected with it. The remains of a straight staircase can be distinctly traced in the corridor lying on the inside of the eastern member of the square. This staircase led from the kitchen to the principal floor, and seems also to have been continued from that floor to the upper or attic floor above. The latter contained good rooms, which were no doubt used as the apartments of the officers and others connected with the Court. The upper floor was originally lighted by means of dormer windows behind the parapet. Some of these still exist, with the initials M. R., and one contains the date 1557. These may either stand for Queen Mary, or her mother, Mary of Guise, who was Regent at the above date, while Queen Mary was still in France. At a later date, probably during the last century, while these rooms were occupied by the Governor, windows were cut through the wall, in order to give better light in the rooms, but sadly to the disfigurement of the building, as seen in Figs. 411 and 412.

The exterior of the Palace (Fig. 411) is of very fantastic design, but it is interesting as being probably the earliest example of the introduction of the Renaissance style into Scotland. We here find in the flat arched recesses, enriched with cusped work, some last traces of the Gothic design which is so apparent in the Parliament Hall, while in the round and baluster-shaped columns, and in their caps and enrichments, we have clear evidence of the Renaissance style. The mode in which the statues are placed upon the building, being set, as it were, in shallow niches, is rather Gothic than classic, but in the grotesque figures themselves there is no difficulty in tracing a rude attempt to imitate some of the well-known models of antiquity. Some of the figures on the south front (Fig. 412) are more native, and better worth attention. One of these represents a crossbow-man bending his bow, another a soldier taking aim, a third one bearing a sword, and a fourth one with a fanciful shield, while some of the other figures are effective, but somewhat coarse grotesques. Here, as we shall see was the case at Falkland, there are clear evidences of the work of Frenchmen brought over by James v. after his sojourn and marriage in France. The cusped work round the arches, the Renaissance details mixed with Gothic forms, and the free use of sculpture, are all features which were much in vogue in France at the time of James's visit, and we may remark in this Palace

an attempt to reproduce the same kind of work which he had admired at Loches and Blois. But the Renaissance work here introduced was

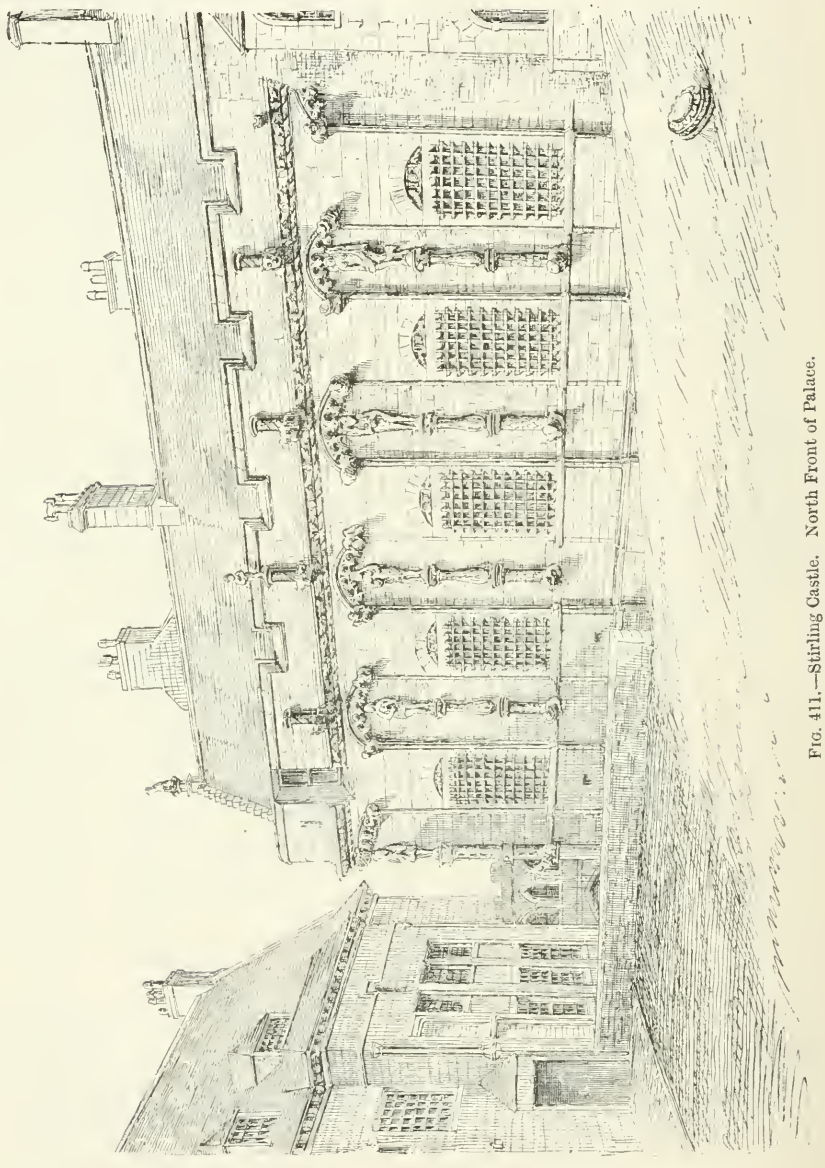


Fig. 411.—Stirling Castle. North Front of Palace.

far in advance of the style generally in use in Scotland. It was not till fifty years later that the Renaissance style became common, and

then it was of a very inferior description to that of Stirling and Falkland.

The square tower (Fig. 409) attached to the Palace on the south side is of older date than the Palace, the latter having been designed so that its windows should avoid the tower, while a fireplace is inserted in its

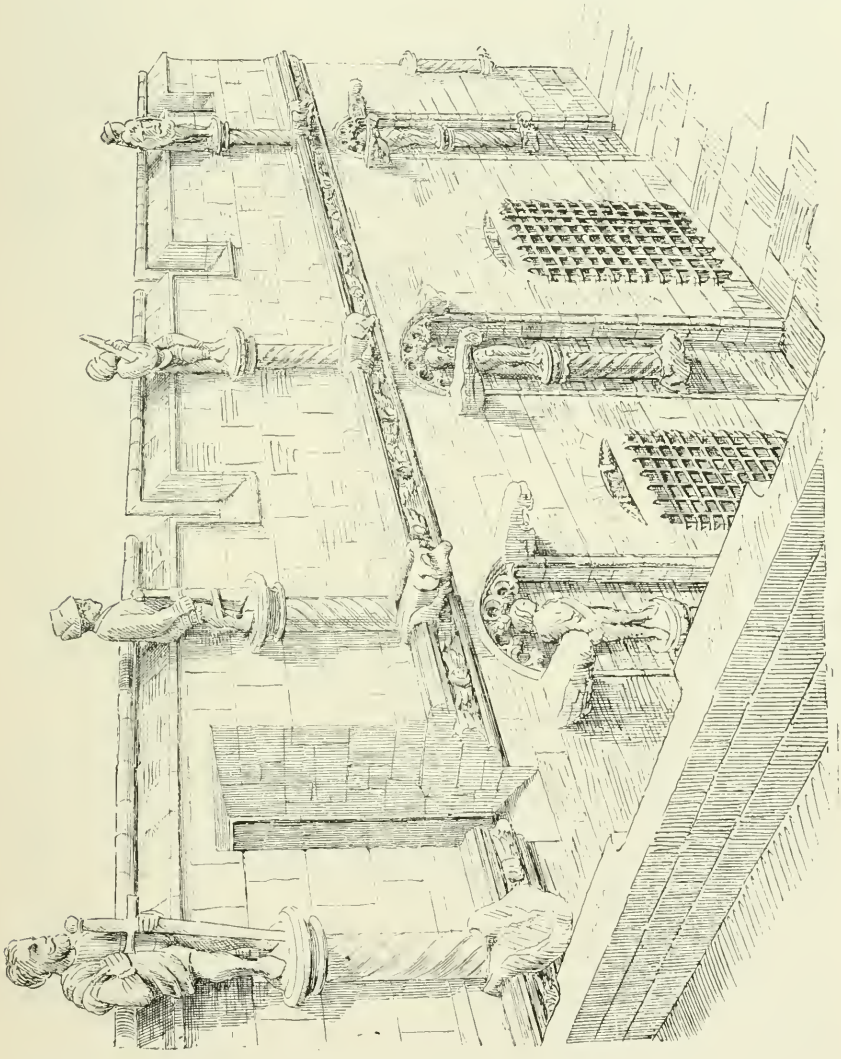


Fig. 412.—Stirling Castle. South Side of Palace.

north wall; and the tower has a distinct staircase from top to bottom (Fig. 406). This was probably the angle tower at the south-west corner of the Castle wall before the Palace was thought of. The outer wall is

connected with it, and the style both of it and the wall is older than that of the Palace (Fig. 409). When the latter was built the space between the Palace and the wall was covered over so as to form vaults entered from a passage on the ground floor under the Palace, with a handsome terraced platform above, on the level of the top of the wall, suitable for guns, and useful both for defence and enjoyment.

We have in this Palace (as in the other Royal palaces at Edinburgh, Linlithgow, and Falkland) early examples of the taste for more extended and luxurious accommodation, which about this time began to be introduced, and of which we see so many specimens in the later mansions of the nobility.

The north side of the inner ward is occupied with the chapel built by James VI. in 1594. This presents us with an example of the fully completed Renaissance design of that period. The interior of this building is cut up with modern partitions and floors so as to form stores, and a new roof has recently been substituted for the old one, which was probably of open timber-work, so that the original features of the chapel are now unrecognisable.

The west side of the courtyard, where the oldest buildings of the Castle originally stood, is now occupied with comparatively modern and uninteresting buildings.

LINLITHGOW PALACE.

Conveniently situated about half-way between Edinburgh and Stirling Castles, this was the favourite residence of the Scottish kings, and is thus intimately associated with the private history of the Royal Family, as well as with a long series of important events connected with the history of the country.

It is supposed that the site of the castle was occupied by a Roman station, being not far from the eastern termination of the Roman wall. But nothing certain is known of the erection of a castle here till the time of David I., by whose charters it is ascertained that early in the twelfth century there were at Linlithgow a royal domain, with a residence, a church dedicated to St. Michael, and a royal burgh.

In 1301-2 Edward I. resided in the castle of Linlithgow for three months during the winter, and in 1302 he seems, from Barbour's account, to have extended the works of the castle, and made it "a Pele mekill and stark." The castle remained in the hands of the English till 1313, when it was taken by the bold and ingenious tactics of William Bunnock. It was then demolished, or at least rendered untenable by Bruce's orders, in accordance with his usual policy. It seems to have remained in this state till 1350, when David II. caused it to be repaired,

and gave John Cairns, an inhabitant of Linlithgow, the liferent of the park round the castle for so doing. From this time Linlithgow became a favourite place of residence of the Scottish kings. Robert II. and Robert III. were often here, and the latter held a Parliament in Linlithgow in 1399. In 1424, the town, church, and castle were all destroyed by a great fire. From the Lord High Treasurer's Accounts (edited by Dr. Dickson, of the General Register House) it would appear that in 1425 preparations were made, under James I., for the building of a new palace, and that up to 1430 the work was actively carried on, and £2440 expended thereon, under John of Walton as Master of the Works. Under his successors, Robert Wedale, Robert Livingston, John Holmes, and John Weir, the work was continued till 1451. The part then erected was probably the west side (Fig. 413), and perhaps the north side, afterwards rebuilt by James VI. In 1467 the works were resumed under Henry Livingstone, and during the next four years considerable sums were expended.

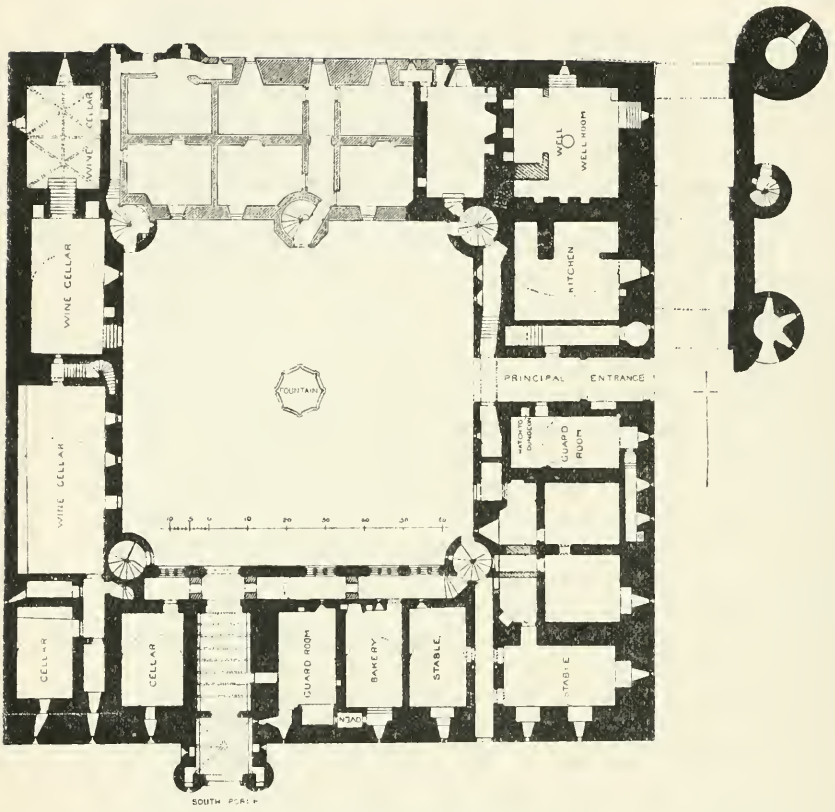
From 1488 to 1496 the south side seems to have been erected, or rather completed, as the purchase of timber for the roof of the chapel is mentioned. At this period frequent entries for materials and wages show that the reconstruction was being steadily prosecuted.

The palace was much frequented by James III. and James IV., under whom a great deal of the above work was carried out. Extensive operations were also undertaken by James V., who seems to have made considerable alterations on the palace. Thus the detached gatehouse leading from the town was erected by him, and the entrance to the castle was changed to suit the altered approach. This rendered necessary the new south porch and entrance passage. James V. spared no pains to make the palace ready for the reception of his bride, Mary of Guise, who is said to have declared, when brought home to it, that she "had never seen a more princely palace."

Linlithgow Palace and lordship formed the jointure of the Queens of James III., James IV., and James V., and in it were born James V. and Mary Queen of Scots.

The palace is very pleasantly situated on a knoll which projects from the south into the loch of Linlithgow. On this knoll stands also the church of St. Michael, while the town lies in a hollow to the south. This residence has more of the character of a mansion than the other palaces of the King in Edinburgh and Stirling Castles. Such designs indicate the tendency of the age. From the time of James I. we find the Royal Family preferring mansions of this description to the more gloomy castles of their ancestors, and the pleasant dwellings of Linlithgow, Holyrood, and Falkland were the result of this desire for improvement in accommodation and amelioration of surroundings.

The palace of Linlithgow is designed in the form of a mansion surrounding a courtyard.



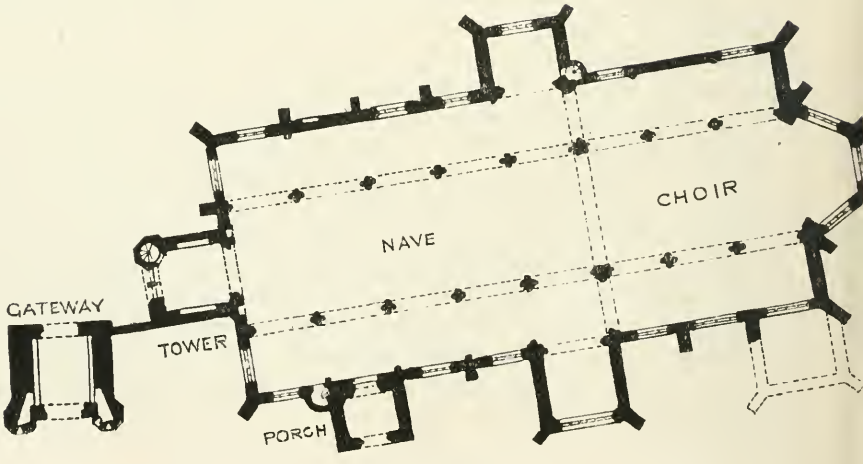


Fig. 413.—Linlithgow Palace and Gateway, and St. Michael's Church. Plan of Ground Floor.

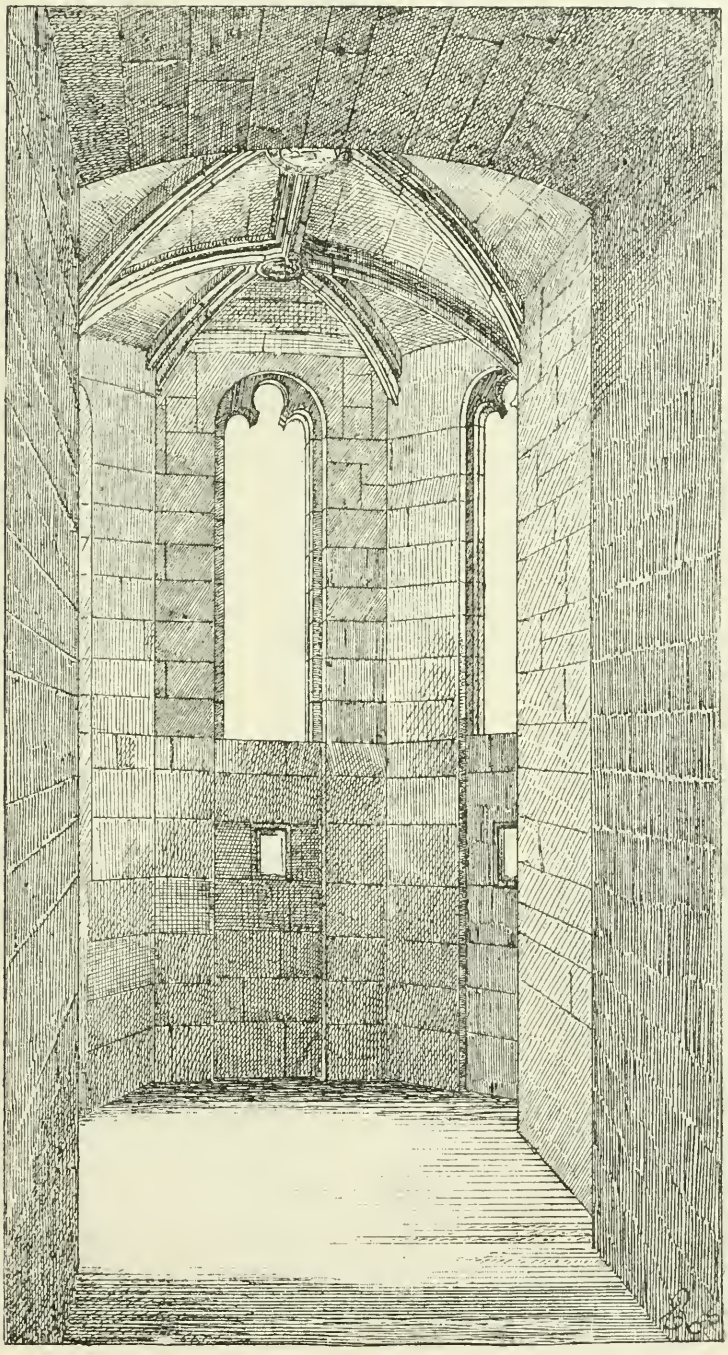


FIG. 414.—Linlithgow Palace. Interior of Bow Window at the North-West Angle.

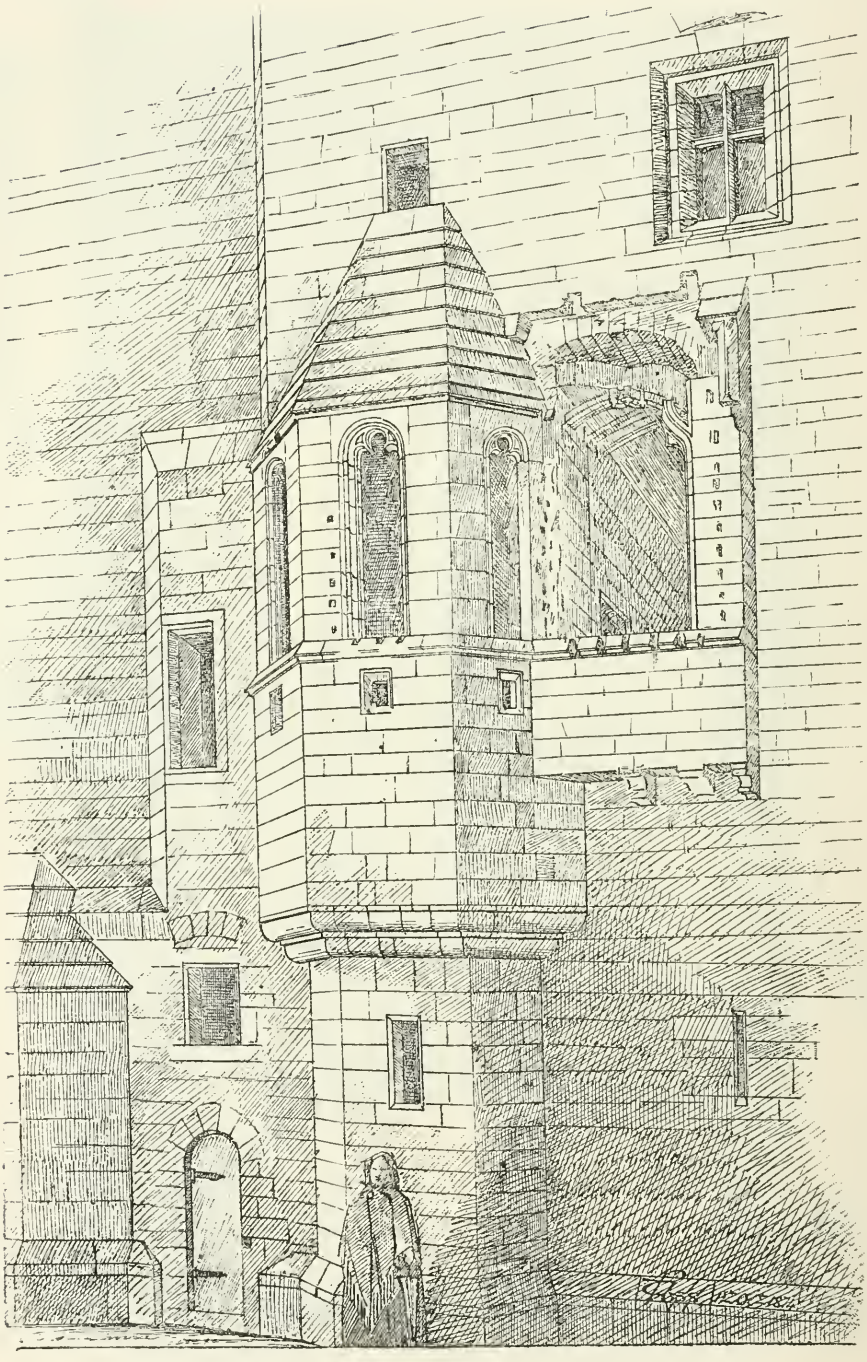


Fig. 415.—Linlithgow Palace. Exterior of Bow Window at the North-West Angle.

The oldest portion (as above mentioned) is probably enclosed within the existing walls at the south-west corner. The plan of the ground floor (Fig. 413) shows that there are at this point old walls inside the present outside walls, that on the south side having been clearly added in order to continue the south wall of the chapel straight along to the south-west corner. The architectural details of the various other parts of the building correspond with the dates above assigned to each. The north side, as we shall afterwards see, was rebuilt by James VI., but was probably originally one of the oldest parts of the building.

The groined vaulting and bow window at the north-west angle (Figs. 414 and 415) and the vaulting of the cellar beneath, together with the vaulting of the buttery at the north-east angle (which was altered in James VI.'s time), indicate a date pretty early in the fifteenth century. The same remarks apply to the principal parts of the east and south fronts. The ornaments of the fireplace of the great hall, as well as those of the original entrance gateway, both to the exterior and on the side next the courtyard, and the carved work of the chapel and its windows, all belong to a period anterior to the first introduction of the Renaissance style, which, as we find at Stirling, probably occurred about the year 1500.

The principal entrance to the castle (Fig. 416) was originally from the east. The entrance passage passes under the great hall, and is defended with three folding gates and a portcullis.

It has also been provided with a drawbridge, which fell on an outer wall strengthened with towers. It is sometimes supposed that these towers are the remains of the "Pele mekill and stark" erected by King Edward. The round form of the towers (Fig. 417), and the fact that they are connected with a wall of enceinte, have probably led to this view; but the towers are too small and the walls too thin to represent the round towers of an Edwardian castle; besides, they strongly resemble in character and details similar round towers built by James III. at Stirling. The loopholes in both are also similar in style. The towers appear rather to have been part of the outer wall, which no doubt surrounded the whole palace, and of which traces are to be seen at several places. Such walls were usual in similar buildings; those of Borthwick with its great round tower, Craigmillar, Doune, and Threave, where the round towers are not unlike those of Linlithgow, may be referred to. In this case the enclosing wall probably extended on the south side as far as the churchyard, and joined the detached gateway which forms the town entrance (see Fig. 413).

The entrance passage leads into a spacious courtyard 90 feet from east to west, by 87 feet from north to south.

To the left of the main entrance is the guard-room, from which there is a square hatch in the floor, giving access to the dungeon below. A

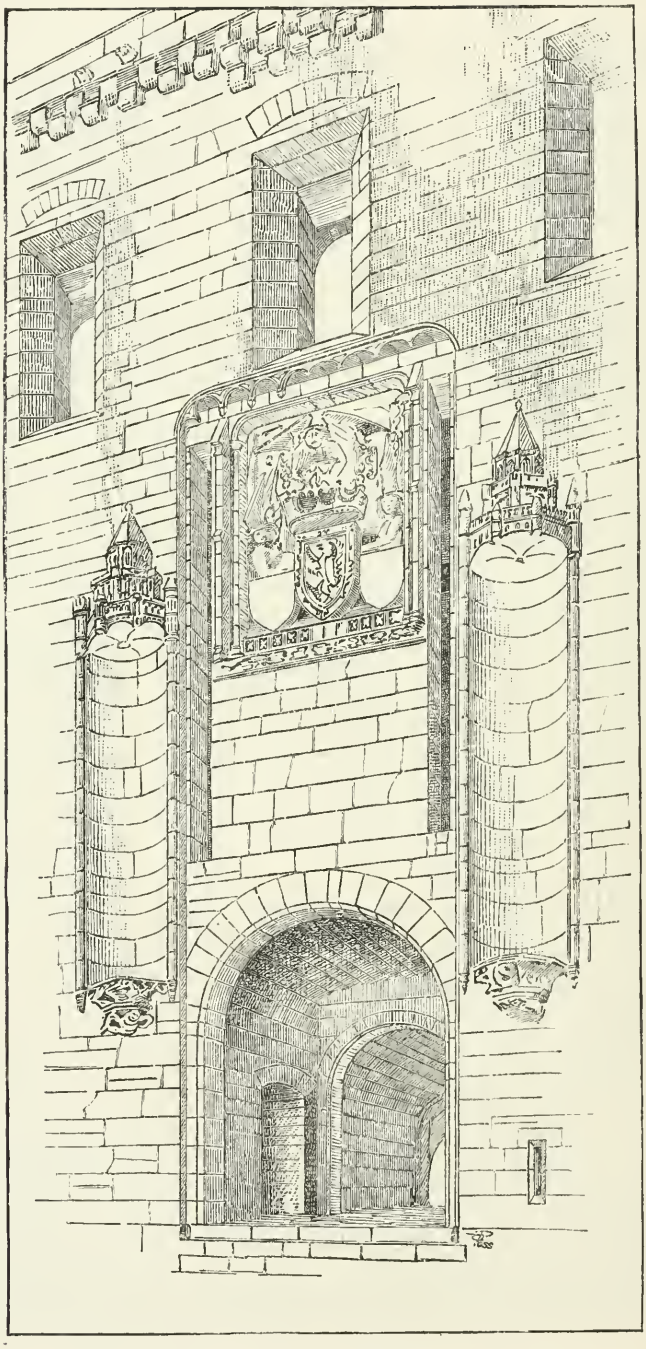


Fig. 416.—Linlithgow Palace. Original Entrance Gateway.

small passage in the outer wall leading to a garde-robe is loopholed for the defence of the drawbridge.

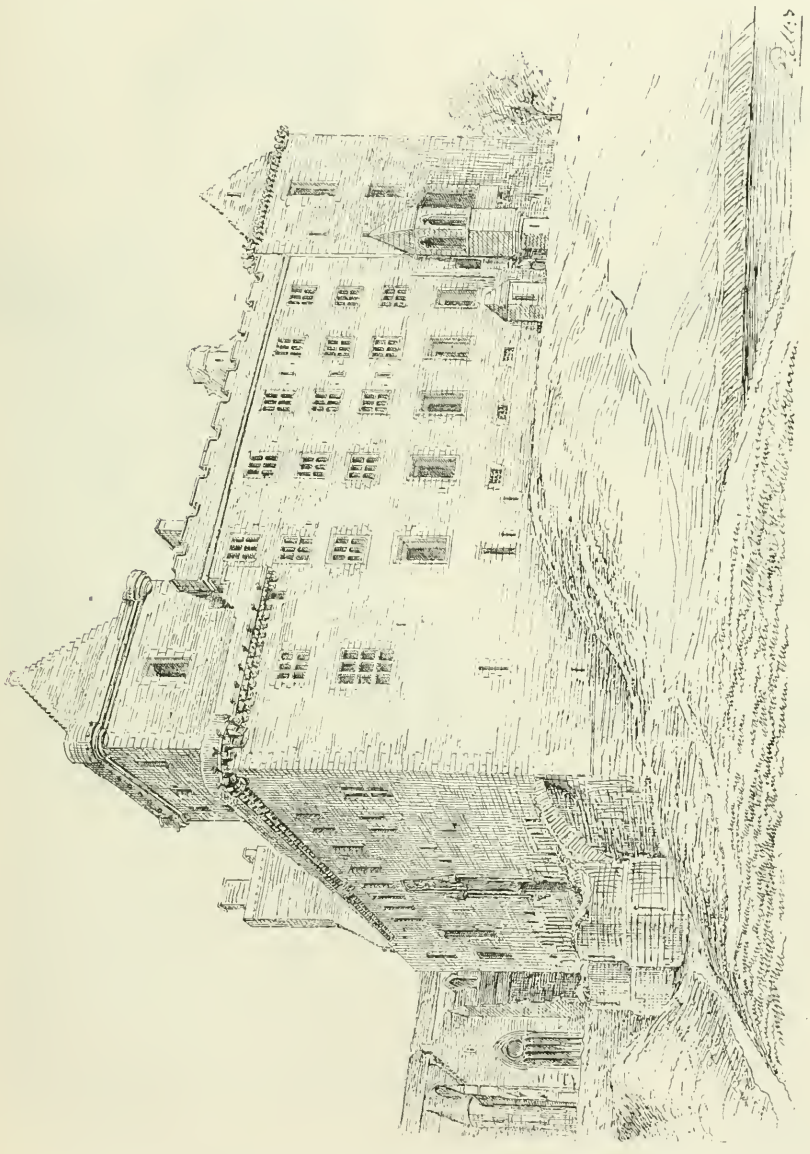


Fig. 417.—Linlithgow Palace. View from the North-East.

To the right or north side of the entrance is a passage leading by a staircase to a lower floor (the ground at the north-east angle of the site being lower than the rest). The chamber in the north-east angle was

originally the well-room. It still contains the well in the centre of the floor, and there are square recesses in the walls for the buckets contain-

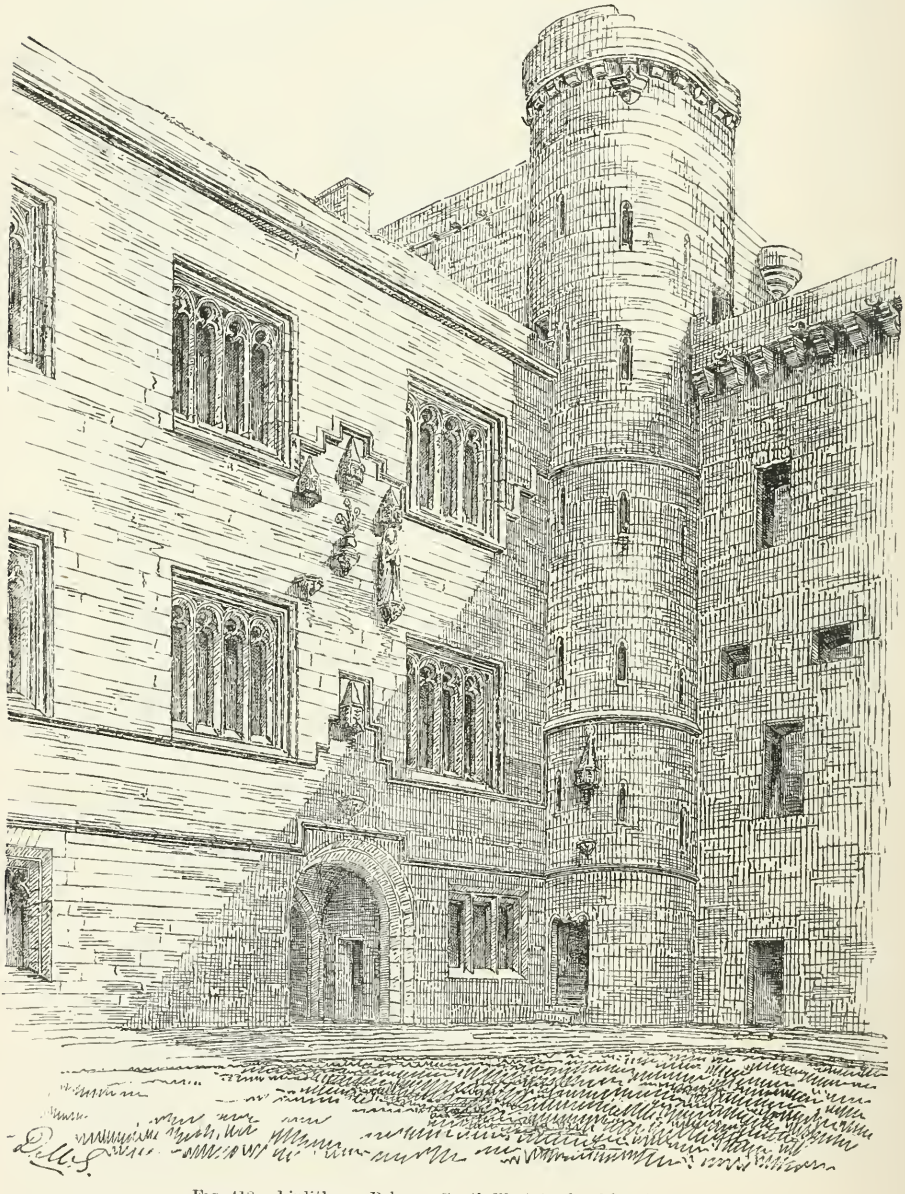


Fig. 418.—Linlithgow Palace. South-West Angle of Courtyard.

ing the water-supply to stand in. At a later period a large fireplace has

been built in this room, which serves as the foundation of the fireplace which was subsequently introduced into the room above. The adjoining room to the south, which has the rather unusual form of an elliptical barrel vault, also contains a large fireplace and oven. This was probably the original kitchen.

The rooms at the south-east angle are said to have been stables, and have a direct access to the external courtyard.

Next to these, in the south side of the quadrangle, is the bakery, with a peculiar oven, heated from the fireplace of the adjoining room.

The south porch and passage (as above suggested) may have been added when the town gatehouse was built. There has evidently been a good deal of alteration at this part of the building, and the corridor along the interior of the courtyard (Fig. 418) was probably added at the same time. This may account for the fine fireplace still existing in the guard-room, which is now so dark that it cannot be seen.

It was to this guard-room that the Regent Moray was brought after Hamilton of Bothwellhaugh had fired his fatal shot, and he here expired in a few hours.

The rooms in the south-west angle are those which show the old wall faced with the new outer one above mentioned. These are said to have been prisons, but seem much more likely to have been beer and wine cellars. The stone ledge for setting the casks on is still visible in the cellar in the angle. The remains of the original angle stair which was used before the corridor was added and the new stair turret built can still be observed.

A large wine-cellar runs along the west side, with a stone ledge for barrels. The only entrance to the so-called prisons was through this wine-cellar, a very unlikely arrangement.

Northwards from this wine-cellar there is another large vaulted cellar, the floor of which is down some steps from the level of the courtyard, and beyond this, in the north-west angle, is another cellar, with groined vaulting, at a still lower level.

The entrance to the first of these cellars is by an unusually wide door, and the entrance and stair leading to the second cellar are also of unusual width. This arrangement has no doubt been to admit large tuns, and these have probably been the cellars for the superior kinds of wine, while the more southern cellars were for common kinds, or beer.

It will be observed that there is a small staircase from the floor above down to these cellars. This is the usual private stair from the dining-room to the wine-cellars. It gives access to the south cellar, while it commands the north cellars by a window, from which the proceedings in these cellars could be superintended or watched.

There is a similar window at Dirleton, overlooking from the lord's private room all the extensive range of cellars.

The first floor (Fig. 419) contains all the principal apartments. The east side is chiefly occupied with the great hall, called also the "Parliament Hall" from having been the place where several Parliaments were held. It is 100 feet long by 30 feet wide, and with its lofty open timber roof must have been a spacious and imposing chamber. A portion of the roof at either end, about 6 or 7 feet in length, is arched in stone, this arching being finished off with a splayed edge. The lower part of the

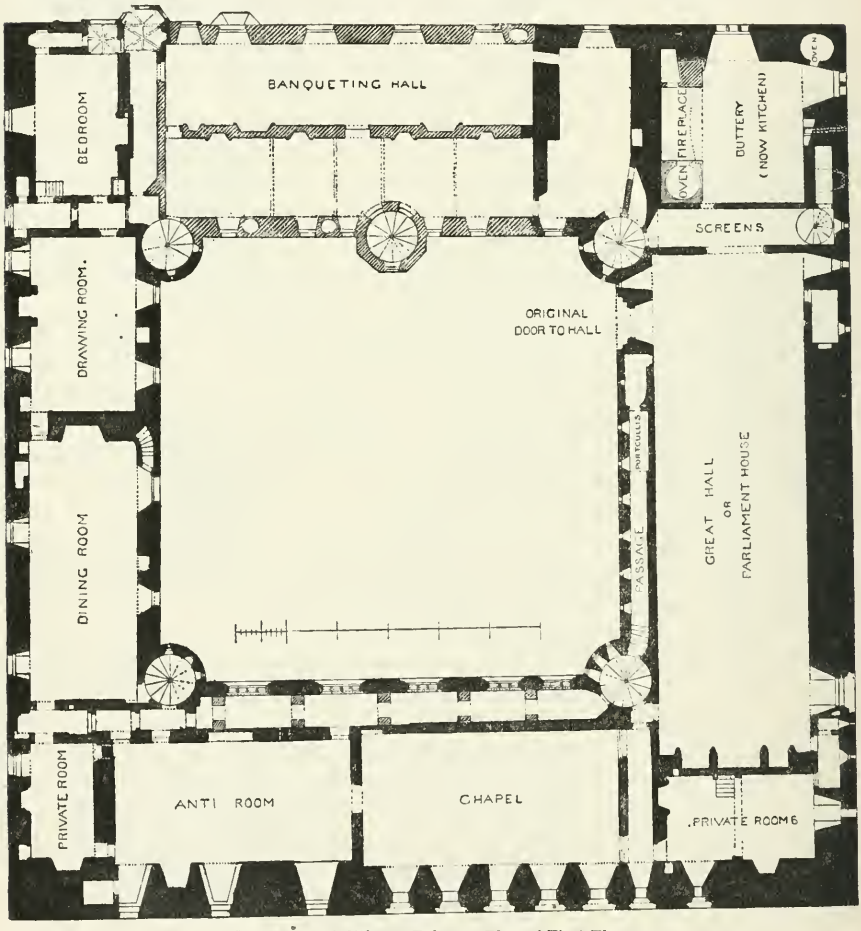


Fig. 419.—Linlithgow Palace. Plan of First Floor.

springing may be observed in Fig. 420. The original entrance was by a wide and enriched door near the north end, to which a handsome flight of steps no doubt originally led from the courtyard. But these steps seem to have been removed and the door disused when the angle turret was inserted. This was probably done when the two southern angle

turrets were built and the corridors added by James v., being an indication of the desire for symmetry which was then coming in, and of which the whole of the plan of Linlithgow is a good example.

At the entrance or north end of the hall we naturally find the "screens" or kitchen passage, in this case shut off by a wall which supported the minstrels' gallery above. There is a wheel stair leading down to the original kitchen at the east end of the passages, but the turret stair inserted in the angle of the courtyard is also so designed as to give access to the basement.

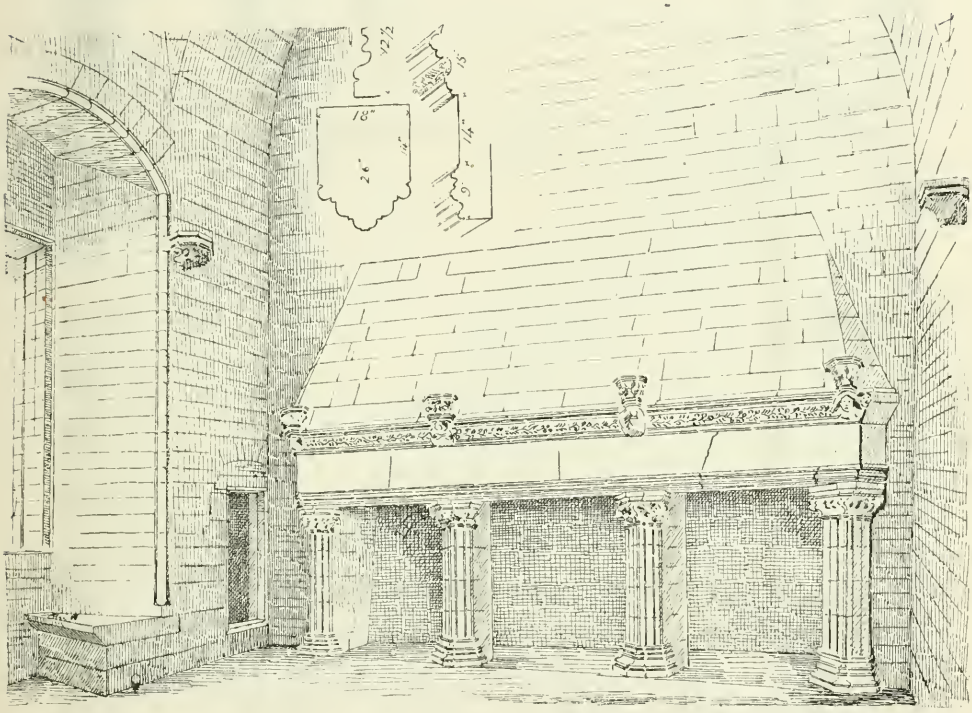


Fig. 420.—Linlithgow Palace. Fireplace in Hall.

The large room to the north of the screens has been converted into a kitchen, probably at the time when the north side was rebuilt by James vi. In earlier times this was probably the buttery. It had a groined vault, the springing and part of the ribs of which are still visible.

At the south end of the hall was the dais, with the usual large window, the fireplace, and doors leading to the private rooms beyond and the chapel. The fireplace is very fine, having three openings and vents, and being richly ornamented with Gothic shafts, with carved caps

and bases, and foliage in the lintels (Fig. 420). On the sloping hood are richly carved brackets for lights, similar to those in the hall of the Knights Hospitallers in Linlithgow, to be afterwards described. A narrow passage in the thickness of the west wall gives communication from the north end of the hall to the angle staircase at the south end, and also gives access to the chamber from which the portcullis was

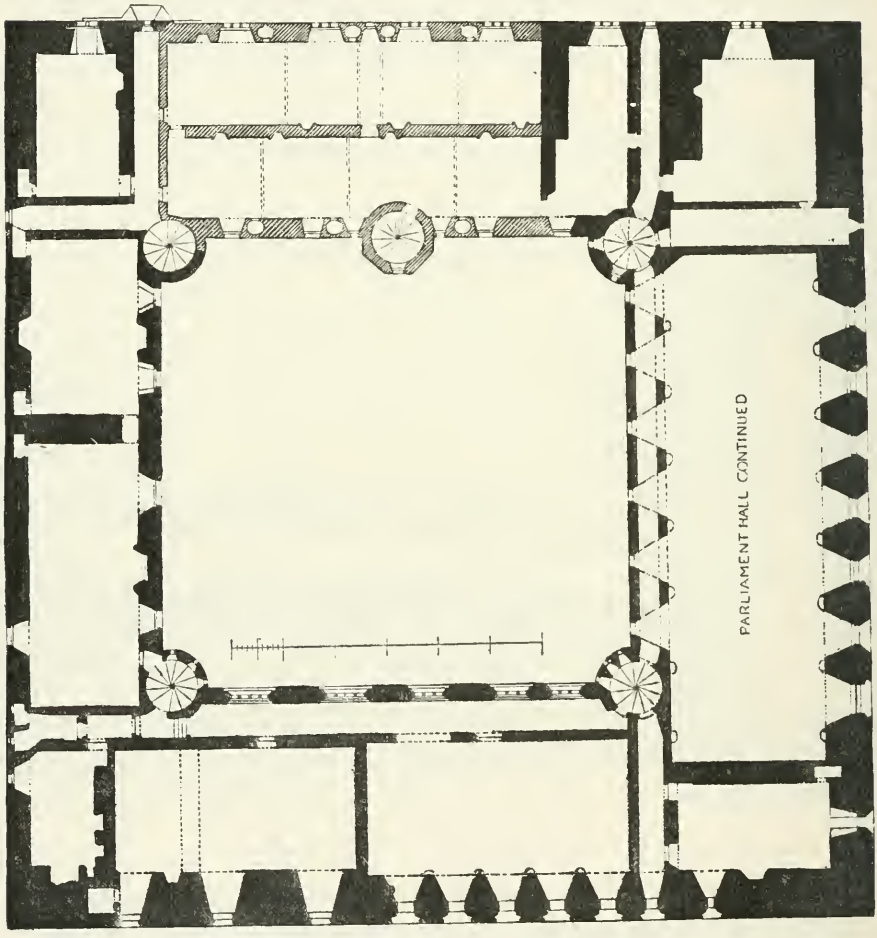


Fig. 421.—Linlithgow Palace. Plan of Second Floor.

worked. The small windows of this passage are seen in Fig. 425. There is a similar passage over this one in the floor above (Fig. 421), forming a means of communication from the north to the south turret staircase, and being also available as a gallery, from which the members of the Court or others might witness the proceedings in the hall below. This

passage exactly resembles the clerestory passage of a church, and has the same effect as seen from the hall. The plan of the second floor shows this gallery with its wide openings into the hall, and the niches which adorned the hall on the piers between. On the opposite side are seen the lofty windows (Fig. 416), with deep external bays, which lighted the hall. This side also had a row of niches and statues between the windows on the inside.

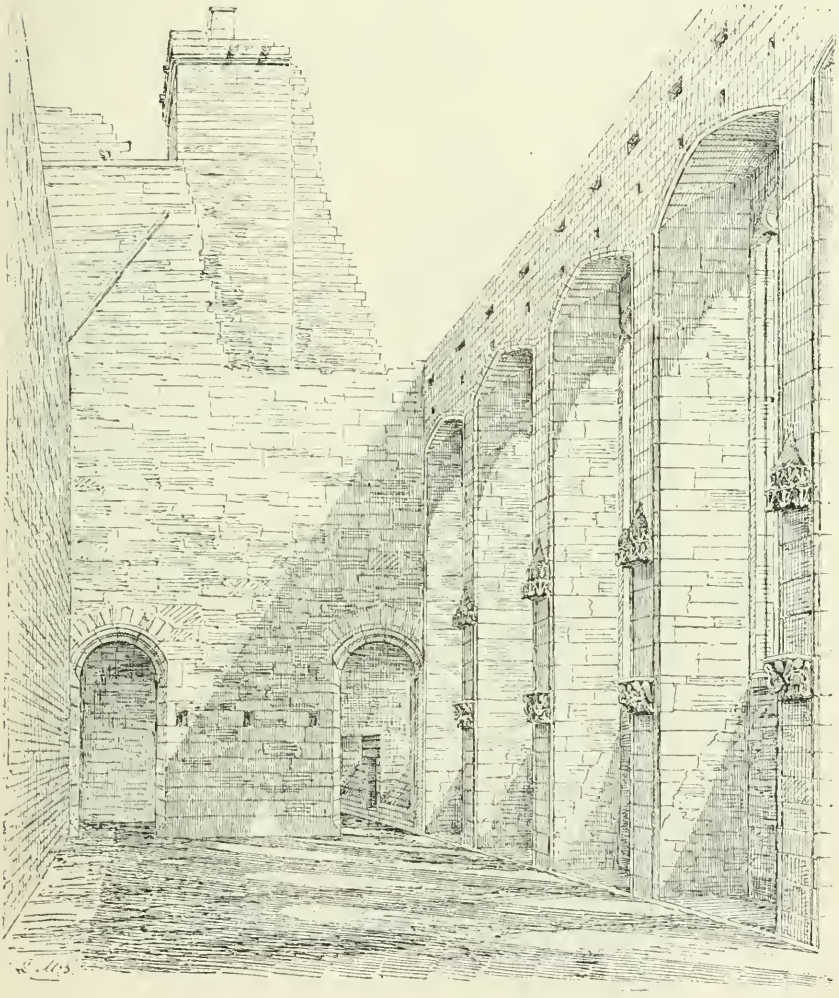


Fig. 422.—Linlithgow Palace. Interior of Chapel.

The south side of the quadrangle contains, on the first floor (Fig. 419), the chapel and a large anteroom adjoining, with a wide door between.

The chapel has been beautifully decorated, as may be seen from the remains of the canopied niches and deep pointed windows along its south side (Fig. 422). The canopies are sadly decayed, and the statues gone, but the corbels on which they stood are still adorned with beautifully carved angels playing upon various musical instruments. The passage at the east end gives access from the great hall and the King's private rooms to the chapel. There was a gallery at the west end, and there is a wide opening from the upper corridor into the chapel, making the corridor a kind of gallery from which the altar might be seen. The corridors along this side form a convenient means of passing from the hall to the west side of the quadrangle without passing through the chapel.

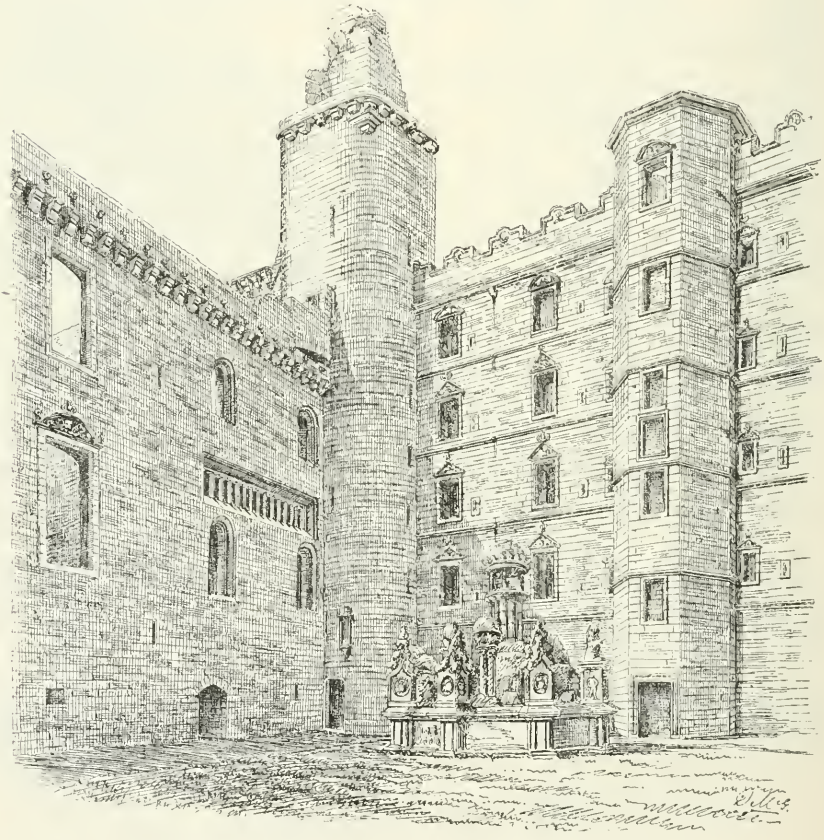


Fig. 423.—Linlithgow Palace. North-West Angle of Courtyard.

Mr. Joseph Robertson has ascertained that "in each of the five windows of the chapel at Linlithgow Palace was a figure or image of what the Records of 1535 call 'made work,' *i.e.* pieced work or mosaic. The price of this was 6s. 8d. a foot, the price of the white or common

glass being thirteen pence a foot—both sums of course being Scotch money. The five images cost altogether less than £10, the plain glass in which they were set costing £15. The painted glass of the five windows of the Lion Chamber (the Parliament Hall), executed in the same year, 1535, cost £7, the common glass costing less than £4."

Many of the other entries in the Records are most interesting in connection with the furnishing of the building. Thus we find that here, as in England, the floors were strewn with rushes, and the walls hung with arras. The glass in the windows was evidently a fixture, but the arras was carried backwards and forwards between Edinburgh and Linlithgow. The furnishings for the chapel, the plate-chests, cupboards, etc., were also carried about as the King changed his residence. The King's organ, or "pair of organs," for use in the chapel, also accompanied him when he moved from one palace to another.

On the west side of the quadrangle are the King's dining-room and drawing-room. The private stair from the dining-room to the wine-cellars has already been referred to. The window, from the ingoing of which this is entered (Fig. 423), was altered in the time of James VI., as is evident from its design.

The small room at the south-west angle is apparently a private room, to which parties might retire from the anteroom or dining-room, or it may have been used as a kitchen or pantry in connection with the dining-room. The dining-room and drawing-room have stone seats in

Fig. 424.—Linlithgow Palace. Fireplace in Drawing-Room.

the window recesses. The drawing-room is usually called Queen Mary's Room, and it is said that she was born there. The fireplace (Fig. 424) is interesting from being very similar to those of the palace at Stirling,

above referred to, page 475. The carving of the caps is so much in the same style that it may have been done by the same artist who designed those of Stirling, and thus serves to connect the history of the two buildings. The long low mullioned window (Fig. 423) to the courtyard, placed near the ceiling of the drawing-room, is remarkable. It is supposed to have been introduced to light up the ceiling, which was probably

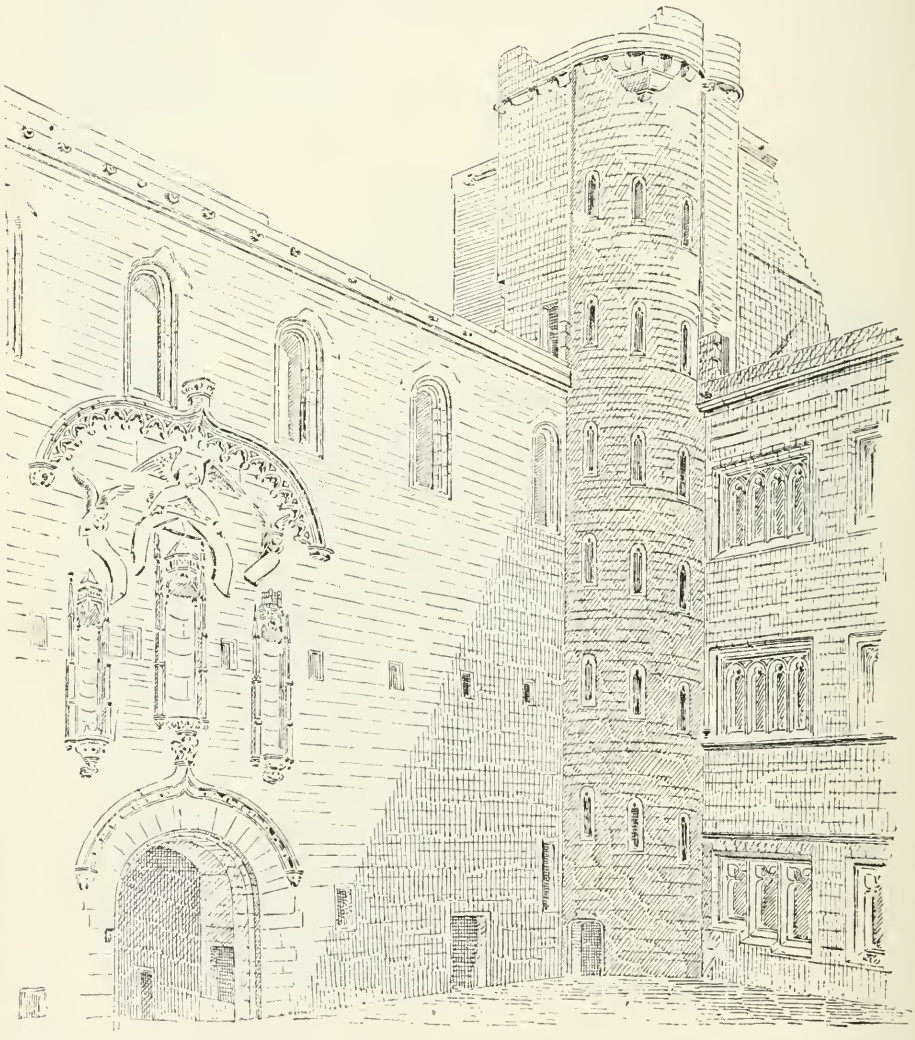


Fig. 425.—Linlithgow Palace. South-East Angle of Courtyard.

of elaborately carved work, like those at Stirling. The floor was laid with a design of mixed pavement and tiles, part of which still remains.

The apartment at the north-west angle was the royal bedroom. The bow window to the north, with fine groined vault (Figs. 414 and 415), was probably an oratory adjoining the bedroom, but has been altered and destroyed by the operations in 1619. There is a small room under the passage, between the bedroom and drawing-room, entering by a trap stair from the bedroom. It is fitted up with bins like a wine-cellar. James III. is said to have been concealed here.

When James VI. visited Linlithgow in 1617 he found the north side of the quadrangle in a ruinous and tottering condition, and ordered it to be rebuilt. The new building seems to have been carried out forthwith, as it bears the dates of 1619 and 1620. This building is a double tenement, having a central wall, and the rooms being lighted from windows on one side only (see the Plans). The basement floor contains six rooms, apparently bedrooms. On the first floor there is a hall 72 feet long by 16 feet wide, called the Banqueting-hall. It has two large fireplaces carved in the Renaissance style of the rest of the building. The rooms next the court appear to have been bedrooms, and each is provided with a small circular closet or garde-robe.

The plan of the second floor shows (as above mentioned) the upper part of the Parliament Hall. It also shows the continuation of the chapel, with the openings from the corridor into it. The other apartments were apparently bedrooms or sitting-rooms, but the floors are now nearly all gone.

The angle stair turrets are continued to the roof, and give access to the battlements. These run all round the building in the form of wide stone gutters, which could be speedily manned, and defended when required. The angle towers are carried a story higher than the rest of the building. The north wing has five stories in the height of the three stories of the other sides.

The sketches of the building show the different styles of the various parts. Those of the east front (Figs. 416 and 417) show the great entrance gateway with its rich decoration. The cusped work over the gateway has some affinity with that of the windows of Stirling Palace, but the niches and figures are of an earlier date, and have none of the classic feeling of those at Stirling. Mr. Joseph Robertson, referring to the interior of this gateway (Fig. 425), finds from the Records of the year 1535 that "the now empty niches above the grand gateway in the eastern side of the quadrangle were filled with statues of a pope to represent the Church; a knight to indicate the Gentry; and a labouring man to symbolise the Commons—each having a scroll above his head, on which were inscribed a few words of legend, now irretrievably lost. This group," continues Mr. Robertson, "together with the group of the Salutation of the Virgin upon the other side of the quadrangle (Fig. 418), and certain unicorns and a lion upon the outer gateway, were brilliantly painted."

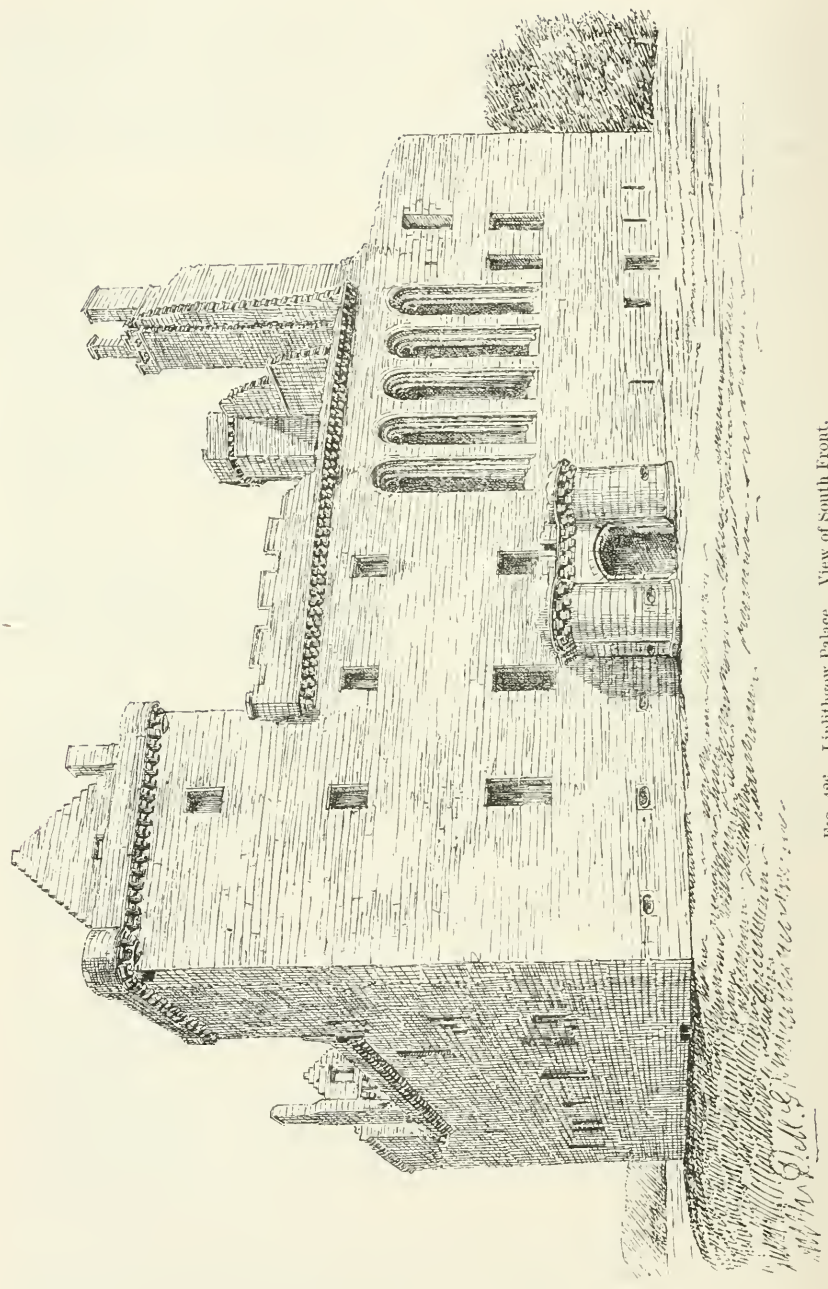


Fig. 426.—Linlithgow Palace. View of South Front.

A good deal of the external work seems to have been painted and gilded as late as the time of James VI. There is an entry in 1629, "For painting and laying over with oyle cullour, and for gelting with gold the haill foir face of the new wark"—the north side.

The south side of the palace (Fig. 426) is marked by the long deeply recessed and cusped windows of the chapel, and by the rather dwarfed porch, with its small round towers and loopholes. Internally this side is remarkable for the corridor on each floor, with windows of a more decidedly English character than those of any other building in Scotland (Fig. 418). They are decidedly "perpendicular" or Tudor in style, and probably later than the building to which they are attached. As above suggested, the south porch is an addition, and these corridors were possibly built at the same time. Fig. 427 shows the entrance to the courtyard by the above porch, and the details of the corridor windows. At Falkland Palace there are corridors added in the same way, which contain windows somewhat similar in style, and these we know were built by James V. The upper niches (Fig. 418) contained the Salutation of the Virgin, whose statue still stands, together with her pot of lilies, but the angel is gone.

The west side is very plain, both externally and internally (Figs. 426 and 423). It should be noticed that the corbels carrying the parapet (both inside and outside) are of an older type than those of the other sides of the square.

The north-west angle turret (Figs. 423 and 428) is the best preserved, and was the highest. This and the south-east or Tyler's Tower (Fig. 425) served as the watch-towers, the top being heightened with a smaller tower crowned with battlements, to which access was got by a winding outside stair. The north-west tower contains, in the inside of the heightened part, a small octagonal room, vaulted with groins, with loopholes on each side, and a stone seat round the wall. It is called "Queen Margaret's Bower" and is referred to by Scott as the seat in which James IV.'s queen kept fruitless vigil for her lord's return from Flodden. Mr. J. H. Parker thinks that this was probably the Queen's oratory, and refers to several similar examples in England. The interior is well illustrated by Billings.

The north side is an excellent specimen of the style of James VI. The interior (Fig. 423) has a strong affinity with the style of Heriot's Hospital, which was designed about the same time, and may have been by the same hand,—perhaps William Wallace, the King's Master Mason for Scotland at the time. The external view (Fig. 417) of this front, owing to the great height of the building, is massive and imposing, and although so late in date, harmonises well with the earlier work.

Fig. 428 is a view taken from the battlements of the west side, and shows the north-west tower crowned with Queen Margaret's Bower and

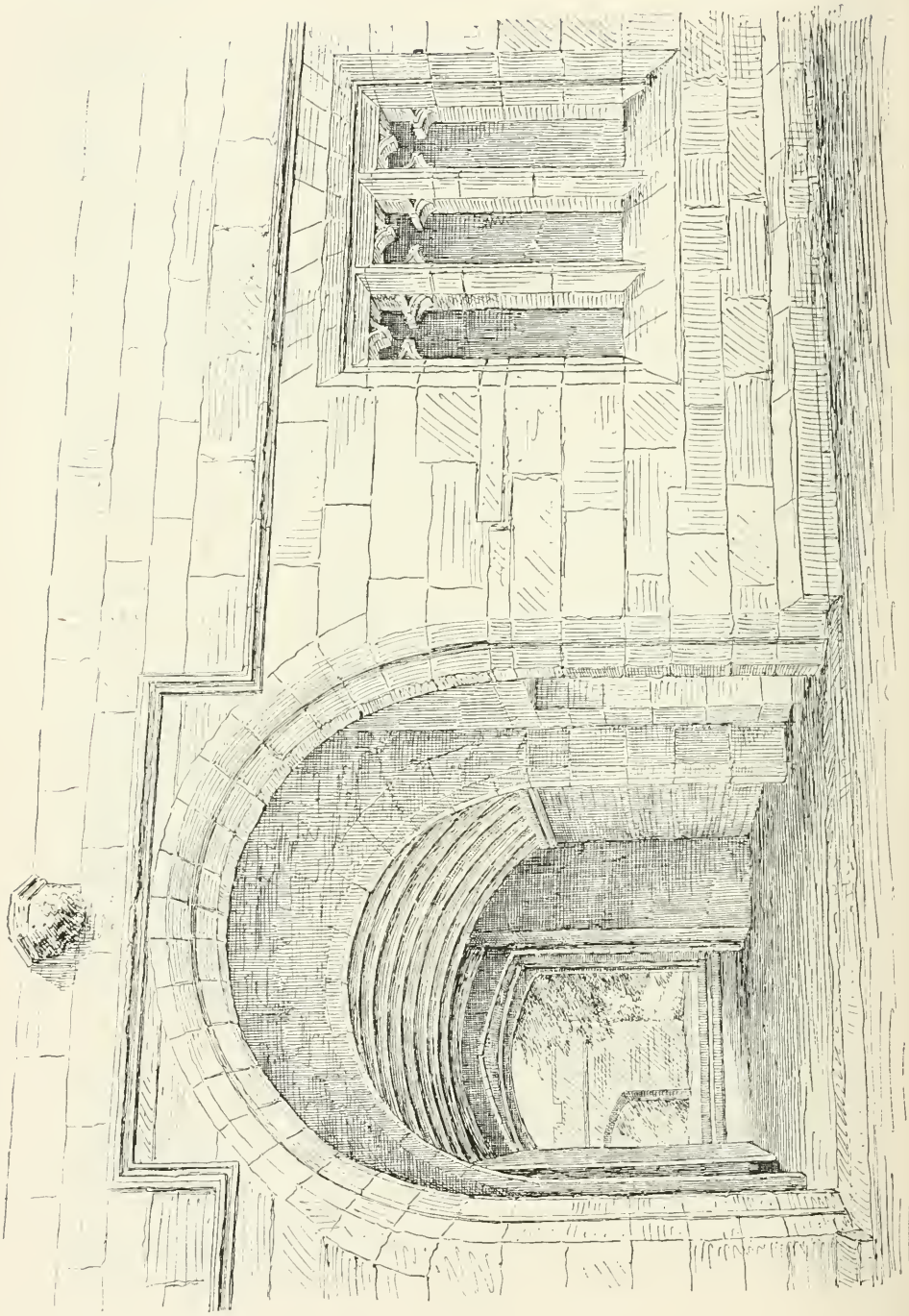


Fig. 427. Linlithgow Palace. Entrance to the Courtyard and Details of the Corridor Windows.

the upper part of the north side rebuilt by James VI. It bears over the central staircase the date 1620.

The fountain (Fig. 423) in the centre of the courtyard has unfortunately been terribly destroyed, but must, when complete, have been a

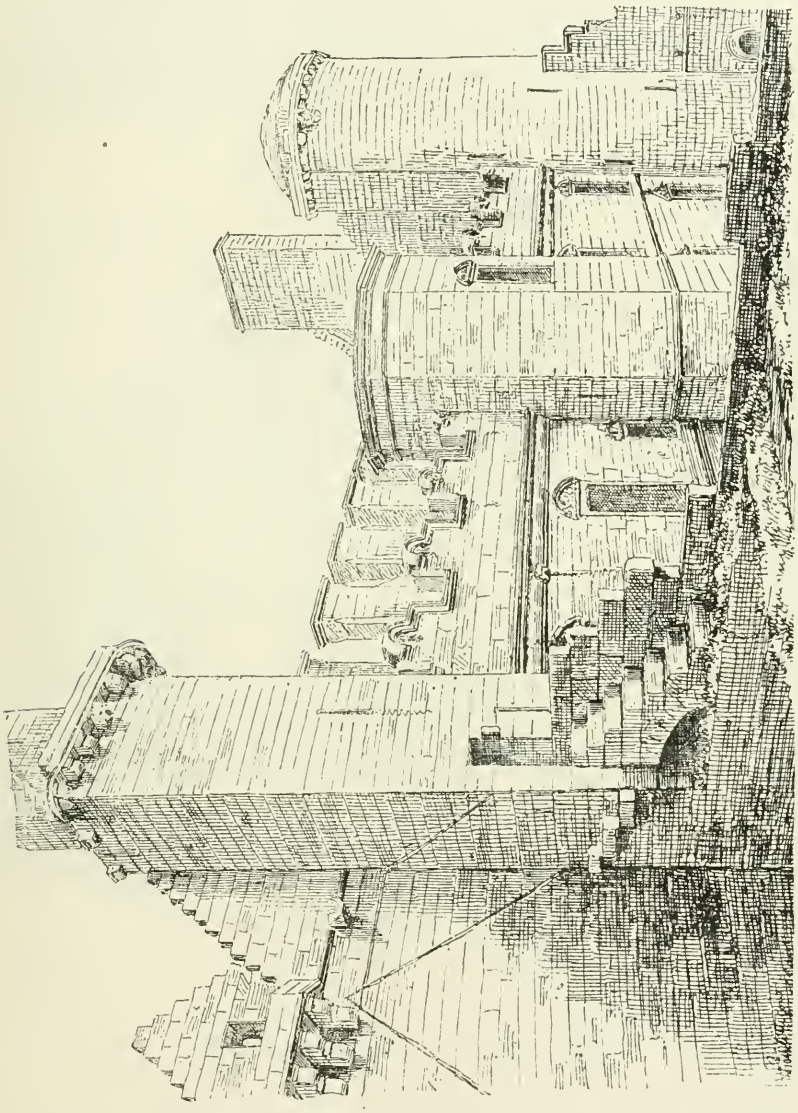


Fig. 423.—Linlithgow Palace. View of North Side from the Battlements.

splendid ornament to the quadrangle. From its style it seems to belong to the time of James V., whose work is marked by the frequent use of

large medallions with heads, as in the Stirling ceilings and at Falkland. This was most probably an idea imported by him from France, where similar medallions were much in use (see Fig. 42).

The gatehouse leading to the town (Fig. 429) was doubtless erected by James v. It is adorned over the archway with his four Orders of Knighthood. Three of these were presented to him, viz., St. Michael by Francis I., the Golden Fleece by the Emperor Charles v., the Garter by Henry VIII. of England, while the fourth, the Order of the Thistle, is said to have been founded by James himself. These shields have been restored in this century.

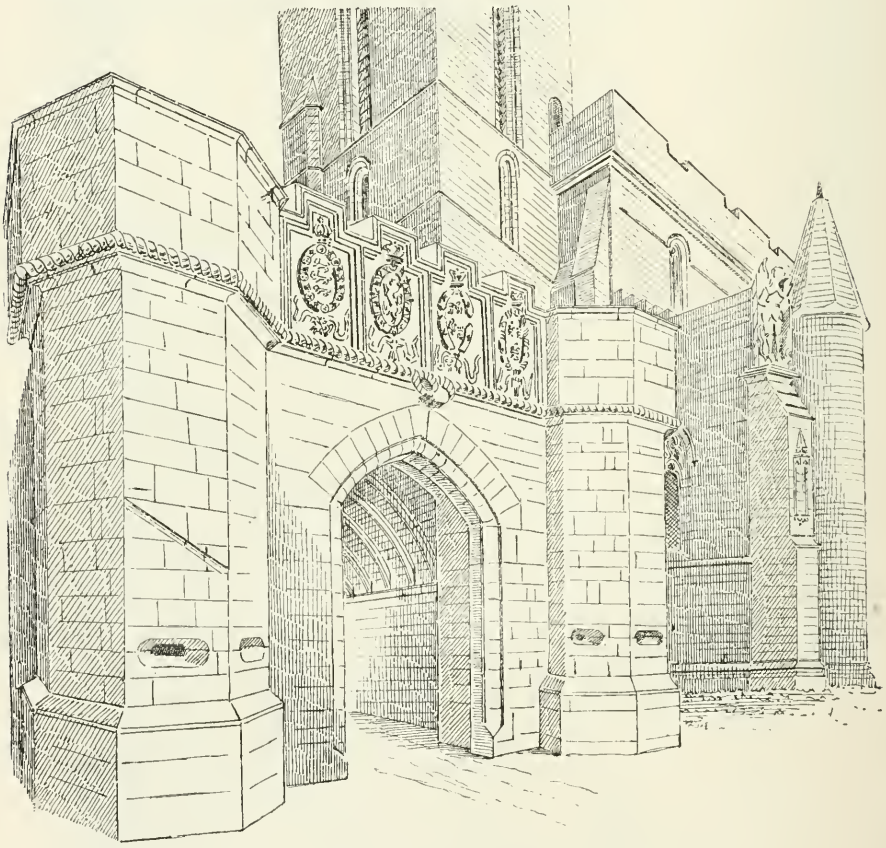


Fig. 429.—Linlithgow Palace. Entrance of Gatehouse.

After the Royal Family of Scotland had removed to London the palace was left in charge of a keeper. During the troublous reigns of the Stewarts it passed through many vicissitudes.

It was fortified by Cromwell, and was occupied by Prince Charlie, and finally burned by Hawley's dragoons in 1746.

Since that time the palace has been a complete ruin. It has fortunately escaped all the numerous proposals which have been made to restore it and convert it into barracks, County Courts, Register House, and what not, and is now happily under the careful guardianship of the Commissioners of Woods and Forests, so that there is every prospect of this most interesting of our Royal palaces being preserved from the destructive hands of both time and the restorer.

FALKLAND PALACE, Fifeshire.

The castle and lordship of Falkland belonged in the fourteenth century to the Earls of Fife, and in 1371 were in the hands of Robert Stewart, Earl of Fife and Menteith, son of Robert II. Under the title of Duke of Albany, that Earl was Regent of Scotland, and occupied the castle of Falkland as his residence for thirty-four years. It was then that the title of Palace was given to this residence; but the palace which then existed has been entirely removed, and it is doubtful whether the existing building is even on the site of the old one.

It was in the old palace that David, Duke of Rothesay, was imprisoned by his uncle Albany, and where he died, under suspicious circumstances, in 1402.

When James I. returned from his captivity in 1424, Murdo, Duke of Albany, the son and successor of Duke Robert, was executed, and Falkland was annexed to the Crown. The domain is pleasantly situated in the valley of the Eden, in the centre of Fifeshire, at a convenient distance from Edinburgh and Stirling, and was surrounded with a forest which afforded ample scope for the practice of the chase. Hence it became a favourite retreat for the Scottish kings. The three first Jameses often resorted to it, and the town of Falkland was erected into a royal burgh by James II. in 1458.

James III. and James IV. are both said to have carried on works at the palace, and one would say, from the style of the south front (Fig. 430), that it belongs to the latter half of the fifteenth century.

The interior of the existing building fronting the courtyard was added by James V., who was particularly attached to this residence. It was from here he escaped out of the hands of Angus in 1528, and here he died, in 1542, broken-hearted at the rout of Solway Moss.

After James's death Mary of Guise often lived at Falkland, and Queen Mary was fond of retiring to it as a hunting-seat.

James VI. resided much here for his favourite pastime of the chase, and, to judge from the style of what remains, he seems to have added considerably to the size of the building.

The palace was occupied both by Charles I. and Charles II. After the battle of Sheriffmuir, in 1715, it became the abode for a short period of a very different sort of personage. Rob Roy Macgregor took posses-

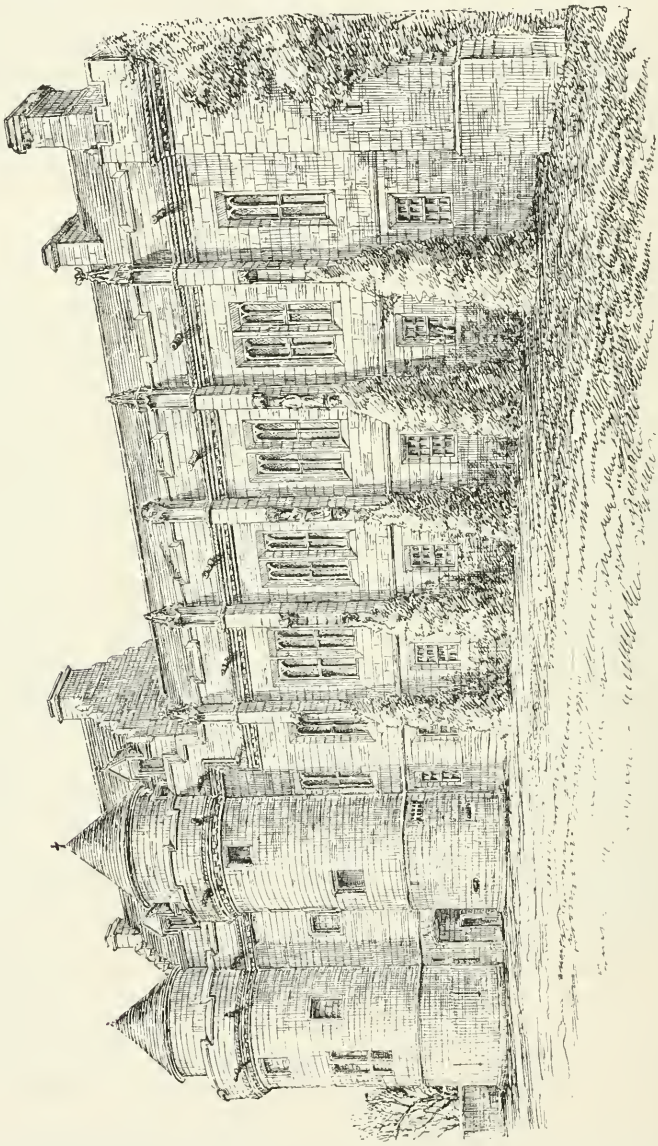


FIG. 430.—Falkland Palace. View of South Front.

sion of it, harried the country around, and carried off much booty to the Highlands.

In Charles II.'s time the building was greatly injured by fire, and

stood for long in a ruinous state; but it has now, so far as it remains, been put into good order by the proprietor, Mr. Bruce, and is partly occupied as a residence by his factor.

When complete, the palace is said to have comprised buildings on the south, east, and north sides of the quadrangle, the west side being enclosed with a high wall. The only portions remaining (Fig. 431) consist of the south side of the square and some remnants of the east side.

At the west end of the southern side between two round towers is situated the archway to the courtyard. It is 9 feet wide, and has a stone seat on each side.

There is no portcullis, showing that this palace was regarded rather as a pleasant country residence than as a castle. On either side, however, there is a guard-room, and in the western tower a dungeon, with the usual trap and stone cover. From the apartment on the east side of the entrance a staircase is carried up in the east tower to the upper floors and the roof. The

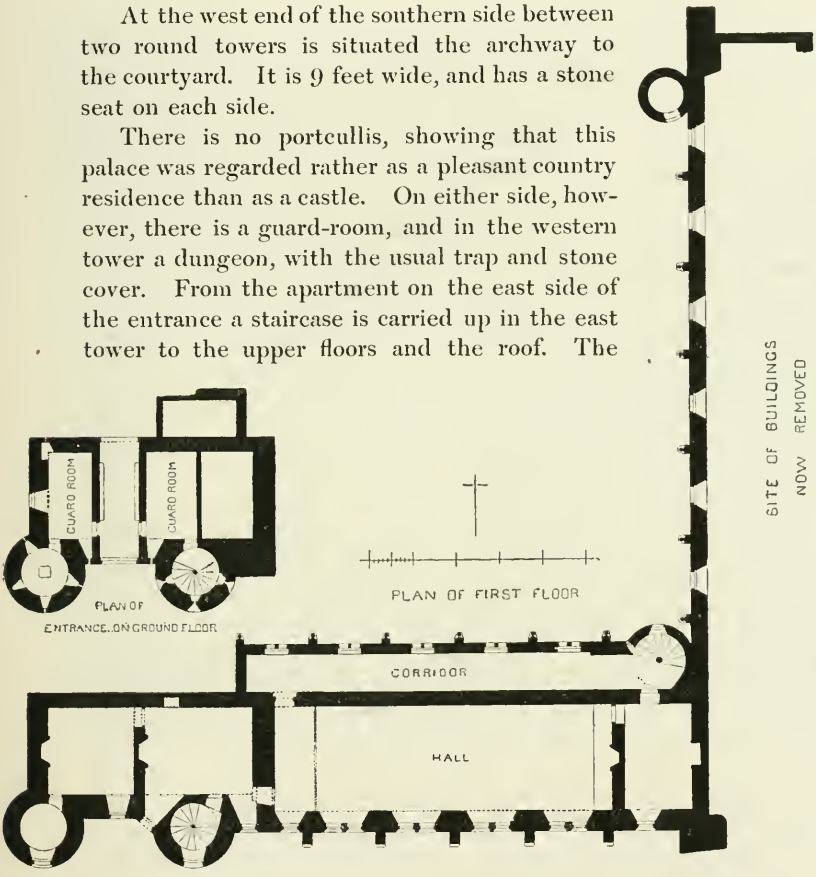


Fig. 431.—Falkland Palace. Ground Plan.

plan of this gateway has some resemblance to the gatehouse of Stirling Castle, and the elevation is also very like that of Stirling, as shown in Slezer's views.

The basement of the main building contains the usual vaulted cellars. The ground floor is now divided as a modern house, but the first floor

(Fig. 431) contains the original large hall, about 80 feet long by 24 feet 6 inches wide.

There was probably originally a turret stair at the west end of the corridor, near the entrance to the courtyard, giving access to the hall and to the rooms over the gateway; but this would be removed when James v. added the corridor along the inside of the building. It was no doubt intended to erect a stair turret at the west end to correspond with that at the east end, but this part of the building does not appear to have ever been completed.

The large apartment on the first floor seems to have been the hall of the palace, from its having "the screens" at the west end. The oak screen separating the passage from the hall still exists (Fig. 432), and is a good specimen of the wood-work of the seventeenth century. Over the screens is the gallery for musicians.

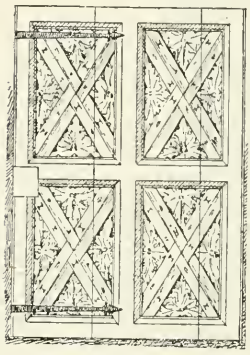


Fig. 432.—Door from Falkland Palace.

The hall is well lighted with four large mullioned windows, and the ceiling, which is of about the same date as the screens, is of wood, and is ornamented with wooden ribs and mouldings. Some traces of painting of a rather coarse kind are still observable.

The door shown in Fig. 432 belonged to the collection of antiquities formed by the late Mr. Paton of Dunfermline, where it was simply marked as from Falkland Palace.

The rooms over the entrance gateway may have been used by the attendants. The stair in the eastern turret adjoining the gateway runs from the basement to the battlements, and may have been in connection with the kitchen on the ground floor; but the remains are so fragmentary that the dispositions of the building cannot now be certainly ascertained.

Turning to the elevations, it has been often remarked that the entrance, with its towers, bears a strong resemblance to the north-west part of Holyrood. We have also seen that in plan and elevation this portion is very similar to the gateway at Stirling, thus showing a striking resemblance in the design of these three royal abodes, which were probably all erected about the same time. It will be observed that the cornice of this portion of the building is continued along the whole of the south front, which is supported with buttresses in a rather unusual manner. These buttresses are ornamented with canopied niches and pinnacles similar in style to the earlier parts of Linlithgow. There can be little doubt, from all these indications, that the gateway and hall are of one date, which was probably in the reign of James iv., towards the end of the fifteenth century.

The south front of the palace is quite unique, and is very effective. While the introduction of the buttresses is unusual, and rather foreign to Scottish work, the forms of the cornice, pinnacles, etc., are quite Scotch, and seem to indicate the attempt of a native architect to introduce a novelty, rather than the work of a foreign designer. The gables over the entrance block have crow-steps, each of which is "gabled," a form occasionally, but not generally, employed in Scotland. It is however to be seen at the hall of Edinburgh Castle.

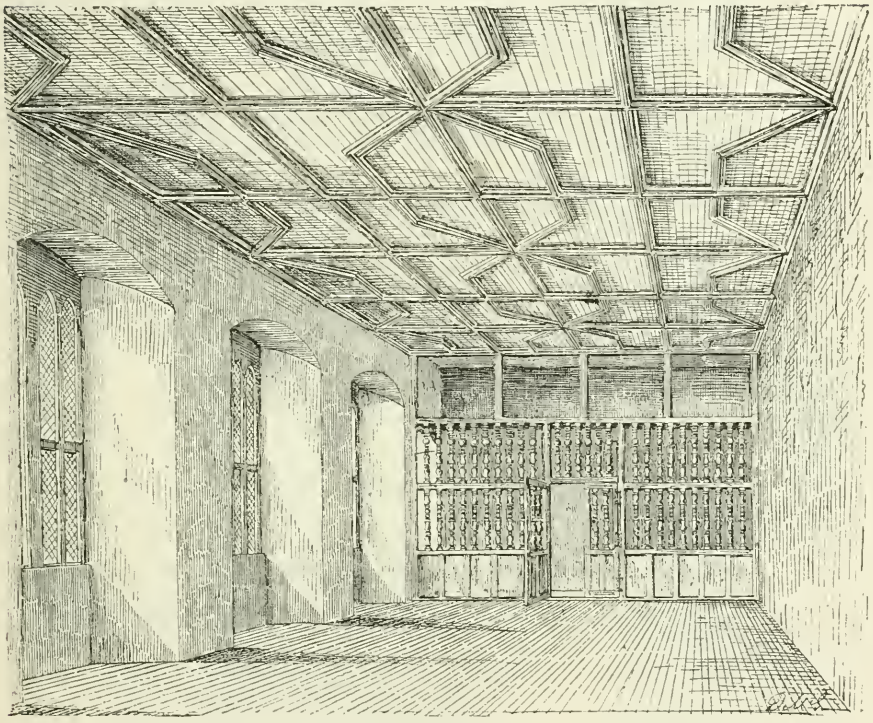


FIG. 433.—Falkland Palace. Interior of Hall.

As already mentioned, the corridor along the inside of the courtyard (Fig. 434) was added by James v. On the plinth under each column occur alternately the inscriptions I.R.5.D.G. and MRIA.D.G., *i.e.* Jacobus Rex v. Dei Gratia and Maria Dei Gratia, the latter being for Mary of Guise, the Queen of James v.

This part of the palace was therefore added between 1539, when James brought Mary home, and 1542, the date of his death. The design is very pure early Renaissance, and has considerable affinity with the similar work at Stirling. There is probably no other building in Scot-

land with such fine Renaissance details (Fig. 435). The corbels supporting the roof of the great hall of Edinburgh Castle are of similar work.

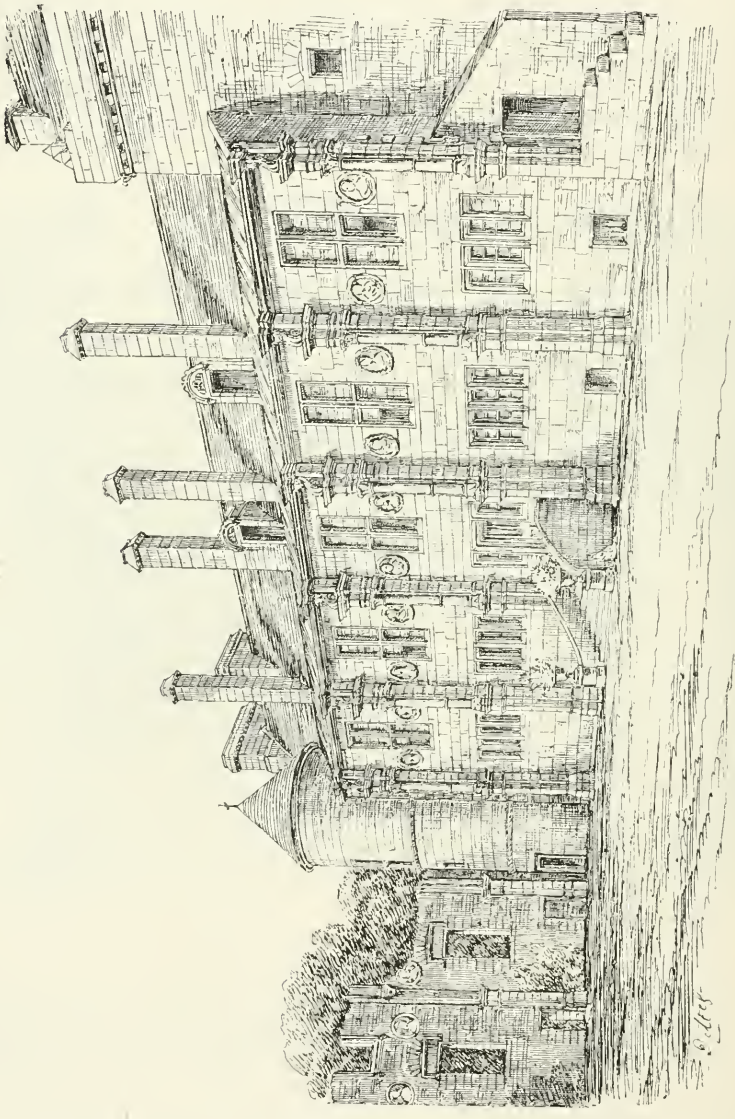


Fig. 434.—Falkland Palace. Interior of Courtyard.

The circular panels containing carved heads are well designed, and although much decayed are still most effective. These strongly recall the well-known "Stirling Heads." The work generally suggests, in both cases, a foreign artist, and we know from the Treasurer's Accounts

that both James IV. and James V. employed Frenchmen on their buildings.

James V. visited France, and spent some time at the Court of Francis I., to whose daughter Madeleine he was married at Loches in 1537. He was no doubt much impressed with the magnificent buildings he then saw in the district of the Loire, and was smitten with the passion for the erection of splendid palaces in the Renaissance style which was then so prevalent in France. The result seems to have been that he brought back with him, on his return to Scotland, French workmen to carry out his designs. We find traces of their handiwork both at Stirling and Falkland. The "Stirling Heads," and those in the medallions on the north front of Falkland Palace, are precisely similar to those which form a leading feature in the designs of most of the French châteaux of the period, while the details of the Falkland corridor have a very striking resemblance to those of early French Renaissance work.

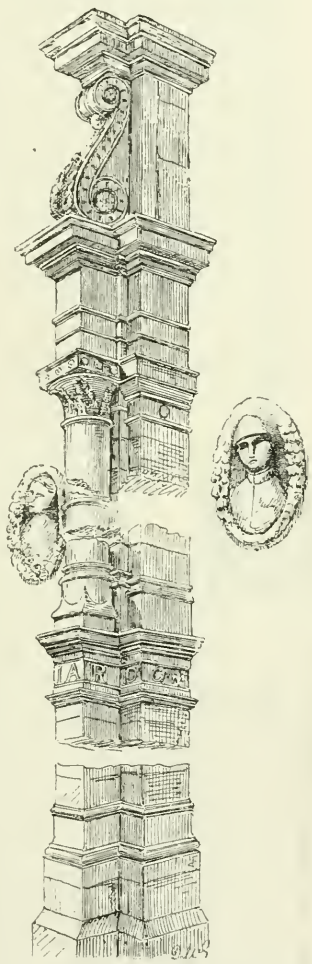


FIG. 435.—Falkland Palace. Details of Corridor in Courtyard.

In the caps and bases of the columns and pilasters, for instance, we see the same peculiar reminiscence of the Late Gothic method of interpenetration of mouldings which is characteristic of French work, while the foliage of the caps and the forms of the mouldings strongly resemble similar work of this period in France.

In illustration of this, compare the details of Falkland with those of the so-called House of Francis I. (Fig. 42) in Paris. There is a similar interpenetration of the caps, and the heads, surrounded with wreaths, are identical in character in both.

In the French example these heads are all portraits of kings and queens of the period. Possibly those at Falkland were also copied from the life.

These are clear instances of work executed by foreign artists. But they stand quite alone in the history of Scottish Architecture, and they anticipate by about half a century the Renaissance work of the "Fourth Period" in the time of James VI., so frequently spoken of by

Billings and others as "French." The details of the latter period are quite different, and they very timidly and slowly encroached upon the old native style; whereas here we have fine French detail and good carving suddenly introduced in a manner which can only be accounted for in some such way as that above described.

The corridor at Falkland is added in a similar manner to that at Linlithgow, and the design of the lower windows in the former is somewhat in the same style as those of the latter.

Of the east side of the quadrangle only part of the inner wall remains (Fig. 434). This is sometimes ascribed to James v., but the work is altogether coarser than and inferior to that of the south side. It is evidently an imitation, but a very imperfect one, of the south side, and is more probably of the time of James vi.

RESIDENCE OF THE KNIGHTS HOSPITALLERS OF ST. JOHN OF JERUSALEM, Linlithgow.

Town houses of this period are rare in Scotland, but we have, or rather *had*, an excellent example in this building, which we regret to observe has quite recently been entirely demolished and removed to make way for "modern improvements." This took place notwithstanding strong protests from the Antiquarian Society of Scotland and the Glasgow Architectural Association, and we understand that even the Town Council of Linlithgow were aroused by the Vandalism which threatened to sweep away from their good town this unique and important edifice. But all protests were in vain.

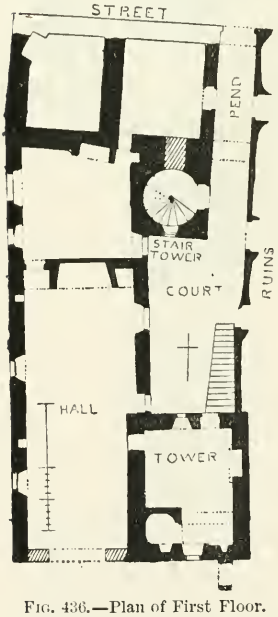


Fig. 436.—Plan of First Floor.

It should be mentioned that there is no historical ground for maintaining the ordinary tradition that this building was the Hotel of the Knights Hospitallers. Mr. Waldie, in his minute and valuable little work on the history of Linlithgow, is of opinion that it was either an almshouse or a leper-house.

Like all the town mansions in Scotland previous to the last century, and like the private residences or hotels on the Continent still, this mansion consisted of buildings surrounding a courtyard (Fig. 436). There was a block of buildings fronting the main street, with an archway leading to the courtyard. At the height of one story above the inner archway there occurred (Fig. 437) three projecting corbels, with

weather table above, which seemed to mark the top of the roof of a

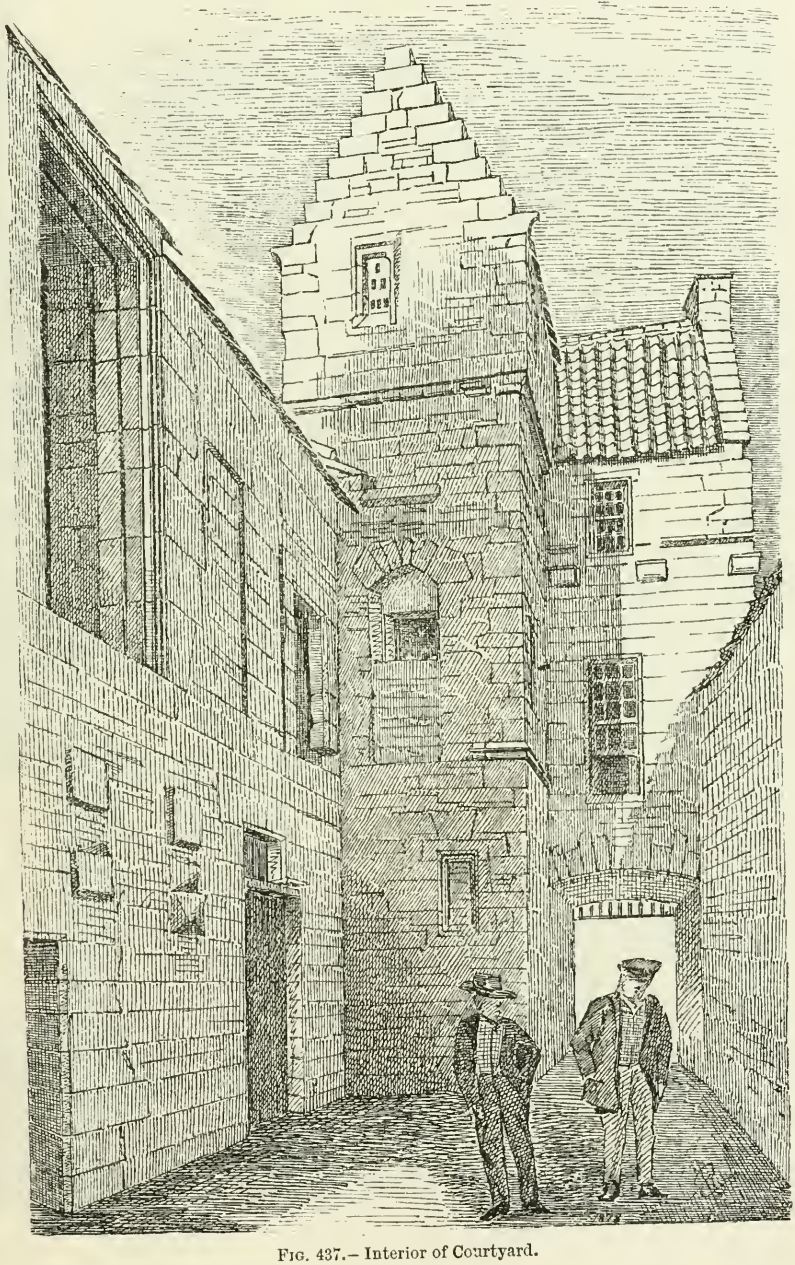


Fig. 437.— Interior of Courtyard.

projecting wooden erection, which may have served as a hoarding for

defence, the hoarding being entered from the window. The street front

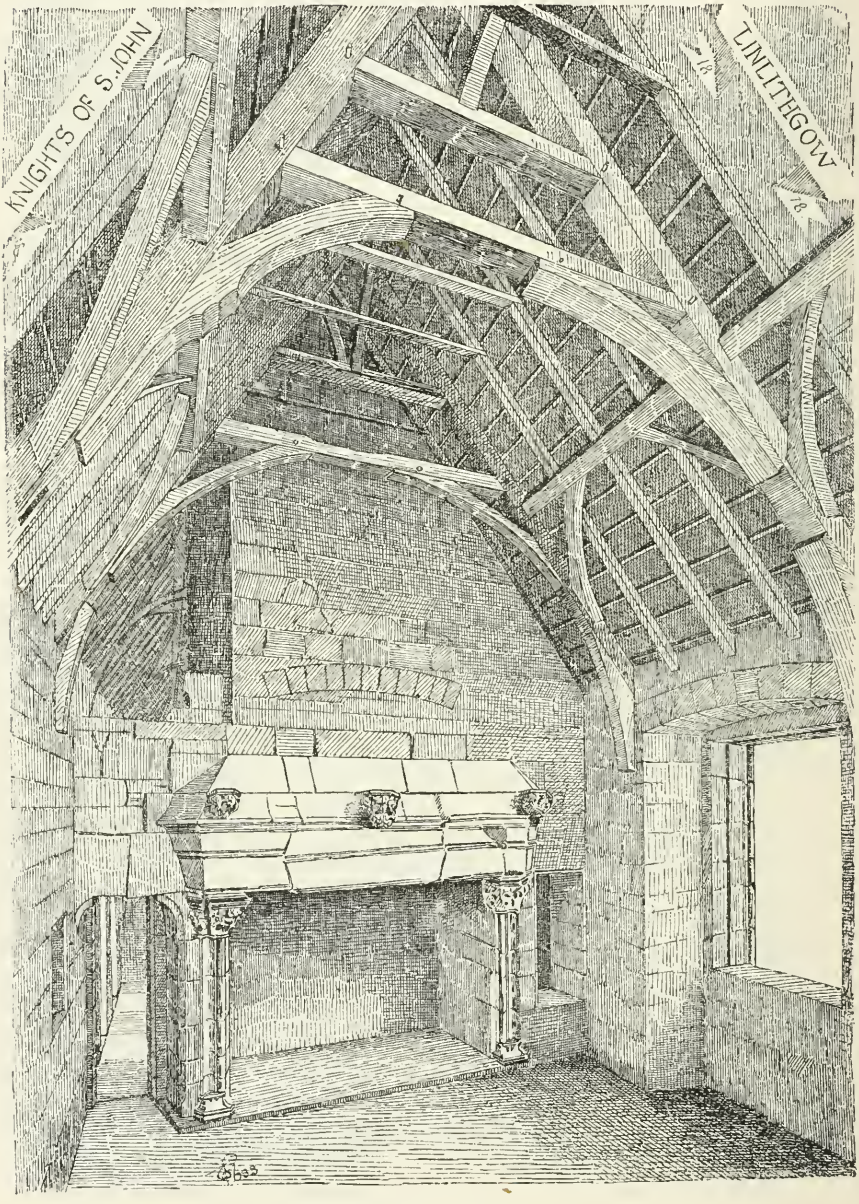


Fig. 438.—Interior of Hall.

of this block had, to a large extent, been rebuilt and modernised.

A square tower, with crow-stepped gables, containing a circular stair-

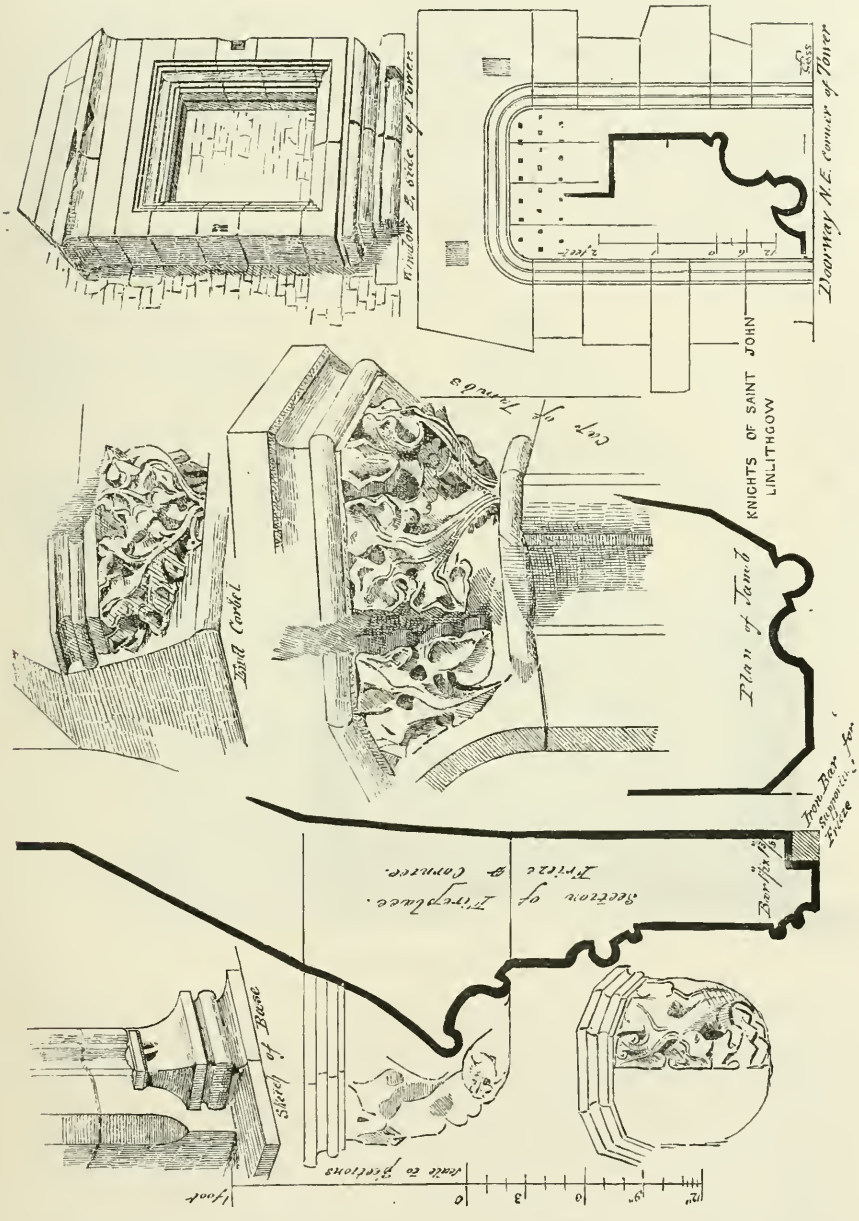


Fig. 430.—Details of Fireplace, etc.

case leading to the upper floors, was placed in the angle of the court-

yard adjoining the entrance, of which a view is given looking through the archway towards the street (Fig. 437).

The basement floor was vaulted, and extended along both sides of the court, and no doubt contained the kitchen and offices. On the first floor on the west side was the great hall, which was the most interesting part of the building. It contained a beautiful fireplace, with finer mouldings and better carving than are generally found in the castles or mansions of Scotland (Figs. 438 and 439). This fireplace was about 9 feet wide and 5 feet 10 inches in the height of the opening. The lintel was a double one, composed of three stones (Fig. 440), fitted together with radiating joints; and, in order to strengthen this lintel, a malleable iron bar,

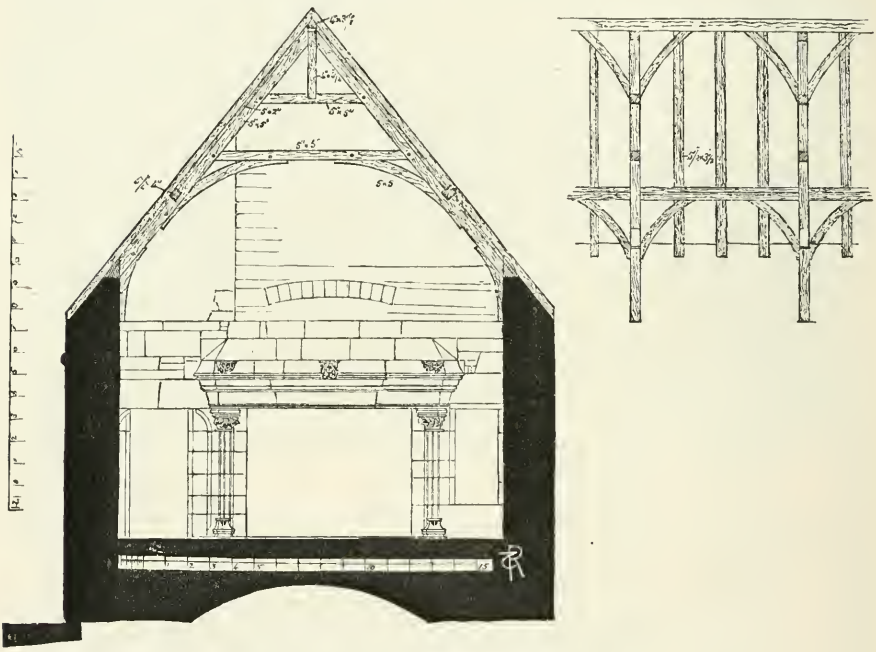


Fig. 440.—Section through Hall.

$1\frac{1}{2}$ inch by $1\frac{3}{8}$ inch, was checked into the soffit, having a rest on the jambs at each end (Fig. 439). This bar was undoubtedly a part of the original construction of the fireplace, and is interesting as being a rare example of iron used in this manner before modern times. The jambs consisted of the bead and hollow mouldings, with carved caps and a peculiar base, which will be understood from the drawings. On the sloping hood of the fireplace there were three beautifully carved brackets, probably meant for holding figures or lamps. The hall had also one of the few remaining open-timbered oak roofs in Scotland,

the construction of which is explained by the measured drawings (Fig. 440).

At the south end of the courtyard stood the old tower, which formed a prominent object in the view of Linlithgow from the railway (Fig. 441). It possessed some unique features in its projecting windows (Fig. 439) and internal arrangements. It was five stories in height, the ground floor, the first floor, and the third floor being vaulted (Fig. 442). The ground floor had a wide archway next the court, so as to form an open vaulted shed, probably for vehicles, with a door at the south end, the top of which is seen in the view (Fig. 441). The first floor was entered

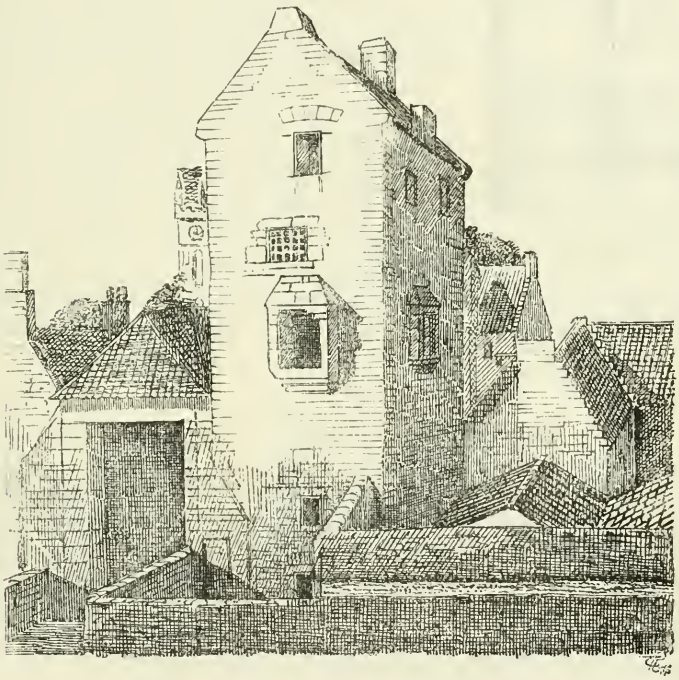


Fig. 441.—View from the South-East.

by an outside staircase from the courtyard. From this floor a newel stair in the south-west angle led to the upper floors. There was a hatch in the vault between the first floor and the second floor, as well as the wheel stair. Hatches are common in the vaults over ground floors, and their purpose is easily understood when they are in that position. To have so placed a hatch here would have exposed the buildings to invasion; for, as already explained, the ground floor is not enclosed. There was little difficulty in lifting heavy goods up the straight stair from the courtyard to the first floor, therefore the hatch was here introduced,

in the vault between the first and second floors, where the wheel stair rendered this operation almost impossible.

Probably this tower was the residence of the superior, and formed a kind of keep, and the hatch in the floor was to enable valuables to be hoisted up hastily in case of need. There was a door from the principal room on the second floor (in which the corbelled windows were), which looked into the hall from a high level, and commanded a view of all that went on there. The position of this doorway is shown on the plan and section (Figs. 436 and 442).

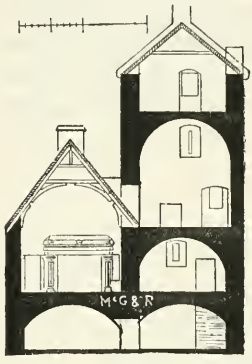


Fig. 442.—Section through Tower.

Of the history of this building absolutely nothing seems to be certainly known. It is said to have belonged to the Knights Templars; but this is impossible, as that order was broken up long before the date of this building, which is probably of the second half of the fifteenth century, or the early part of the sixteenth century. It is also said to have been the town residence of the Knights Hospitallers of St. John of Jerusalem, and this seems to be the general opinion. Their principal place in Scotland being at Torphichen, about four miles distant from Linlithgow (where the ruins of their church still stand), favours this idea.[1]

DUNFERMLINE PALACE, Fifeshire.

The town of Dunfermline occupies a prominent place in Scottish history. The locality was a favourite resort of Malcolm Canmore, and the foundations of a tower, said to have been built by him, may still be traced on a rocky eminence which projects into the valley on the south of the town. It was here that he was married, in 1070, to Margaret, the sister of Edgar Atheling, who exercised so great an influence in the introduction of civilisation and religion from the south.

The Abbey of Dunfermline was founded by Malcolm in this neighbourhood, and became in after times one of the richest and most extensive of the monastic institutions of the country.

Here the sainted Margaret and her husband were buried, as well as a long succession of kings and princes.

From Malcolm's time Dunfermline became a constant residence of the Scottish kings, and the monastery was enlarged and endowed by Alexander I. and his successors. The buildings must have been of

[1] This church is illustrated and described in the *Building News* of 26th March 1886; and also, with greater fulness, in the second volume of the Sketch Book, published by the Edinburgh Architectural Association.

considerable extent at the time of Edward I.'s invasion in 1296, though whether they as yet included a Royal palace is unknown.

Edward passed some months of the winter of 1303 in Dunfermline Abbey, and on leaving set fire to and completely destroyed the buildings which had sheltered him and his army.

The abbey was restored by Robert the Bruce, and he is stated to have added a Royal palace. His son and successor, David II., was born here in 1323.

There does not seem to be much recorded regarding the visits of Royalty during the fifteenth century, but from dates of charters it is ascertained that till the time of James I. it was a frequent residence of the Kings. James IV. stayed in the palace, and James V. visited it during a Royal progress, with his bride, Mary of Lorraine.

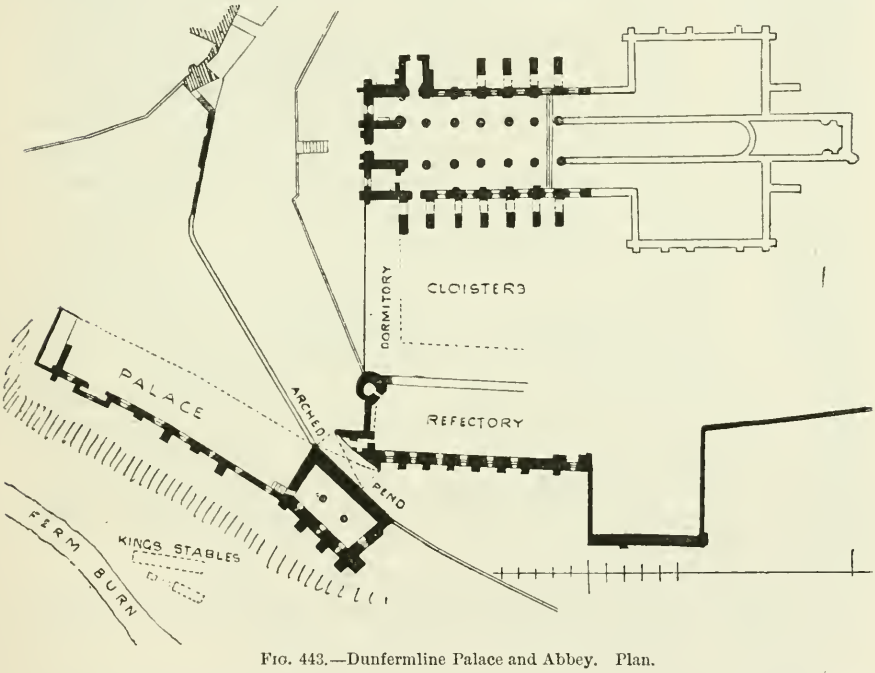


FIG. 443.—Dunfermline Palace and Abbey. Plan.

Dunfermline was a principal residence of James VI., and here were born Charles I. (1600), and Elizabeth, Queen of Bohemia (1596). Queen Anne of Denmark lived much at Dunfermline, where she had a private house of her own (now removed), which stood between the palace and the abbey church.

The palace is situated to the south-west of the abbey (Fig. 443), but was connected with it by a tower through an archway, under which still passes the public road to the town from the south.

The palace has been greatly demolished, the only part now remaining being the south-west wall, which overlooks the ravine below, and some ruins at the east end containing the King's kitchen, etc. It was adjoining the latter that the connection between the monastery and the palace was situated. The kitchen still contains two fireplaces and traces of vaulting, and there are also the ruins of a scullery adjoining. In this eastern part of the building, and under the above, there is a vaulted and groined chamber supported on two octagonal pillars. This was probably used as a storehouse. It is 44 feet long, 24 feet broad, and 14 feet high, and from the style of the sculptured work may be even older than Bruce's time. All this part of the building (on the right in Fig. 444) is, from its style, clearly ancient. The mixture of round and pointed arches seems to point to the "transition" period from Norman to Early English, or the beginning of the thirteenth century. The lower part of the walls of the whole south front most likely represent the work done by Bruce, and perhaps continued by his successors during the fourteenth century. The upper part of the south wall is in a totally different style. The large mullioned windows, with buttresses between (Fig. 445), recall the designs of Falkland and Linlithgow, and there can be no doubt that this portion belongs to the latter half of the fifteenth century. There is no trace of the Renaissance details which James v. introduced at Stirling and Falkland. It rather resembles the earlier work of James III. and James IV.

The whole length of the wall overlooking the glen is 205 feet. It is 60 feet high externally, but the wall of the palace next the courtyard is only about 30 feet in height. On the level of the courtyard, and at the eastern end, was situated the hall, 92 feet long by 28½ feet wide, while the western end was occupied with another large apartment, 51½ feet long, containing a large projecting oriel. This may have been the salon or withdrawing-room. On the upper floor were bedrooms, the fireplaces of some of which still remain. All the other parts of the palace, which formed a court to the northwards, have entirely disappeared; and from the grand design of the south wall we may infer that the loss of the rest of the palace is greatly to be regretted.

The lower story, of which the pointed windows are visible, no doubt formed the cellars of the palace, but they are now choked with rubbish and quite inaccessible.

The Rev. Mr. Chalmers, in his *History of Dunfermline,* has a long dissertation on a sculptured stone (of which he gives an illustration), exhibiting a representation of the Annunciation of the Virgin, and having on it the date 1100 in Arabic numerals; but from the style of the sculpture, and also from the fact of the stone containing the arms of Abbot Dury (1530-41), there can be no hesitation in assigning its age to the latter date.

Mr. Chalmers also explored a subterranean passage which runs from

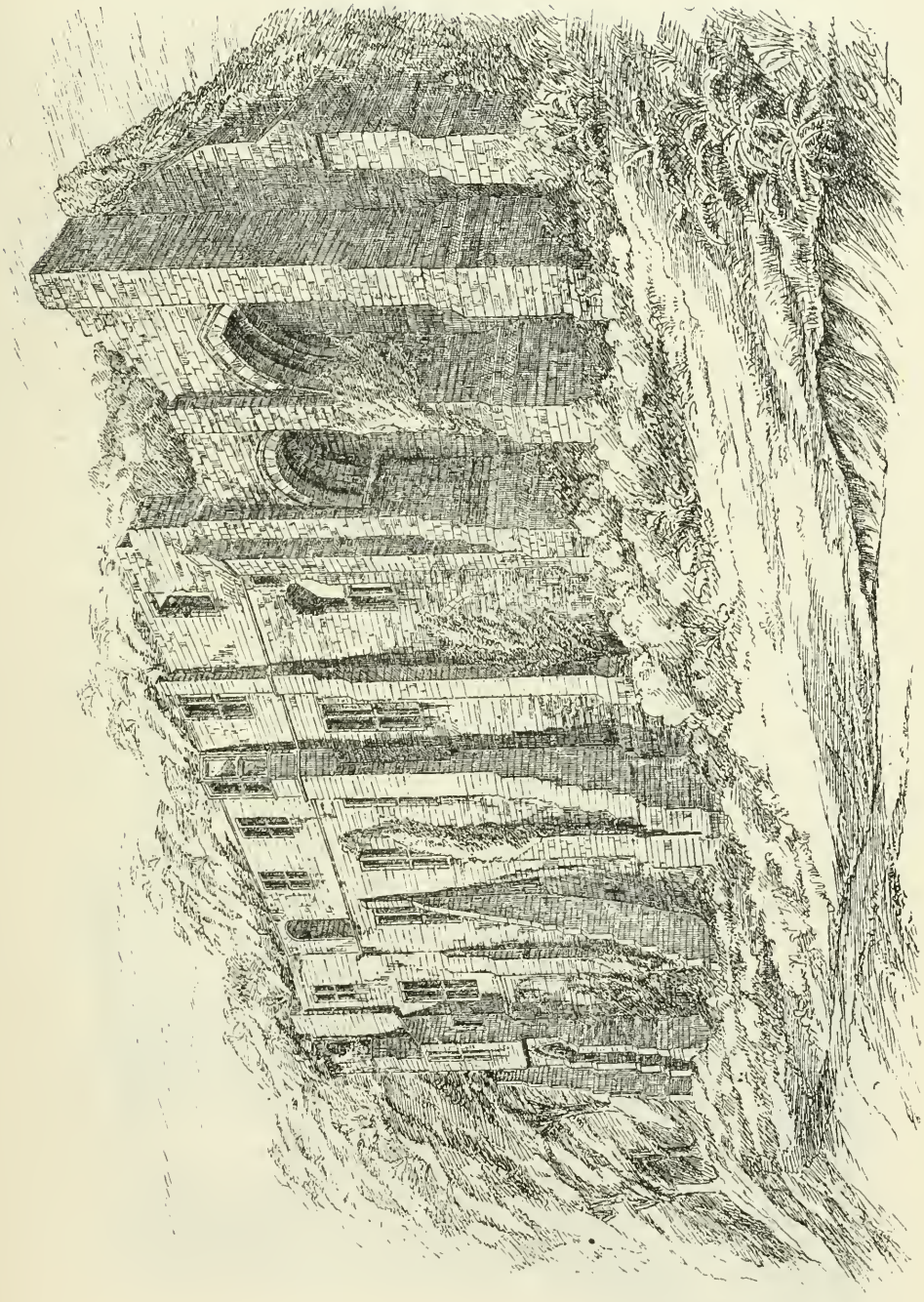


FIG. 444.—Dunfermline Palace, View from the South-East.

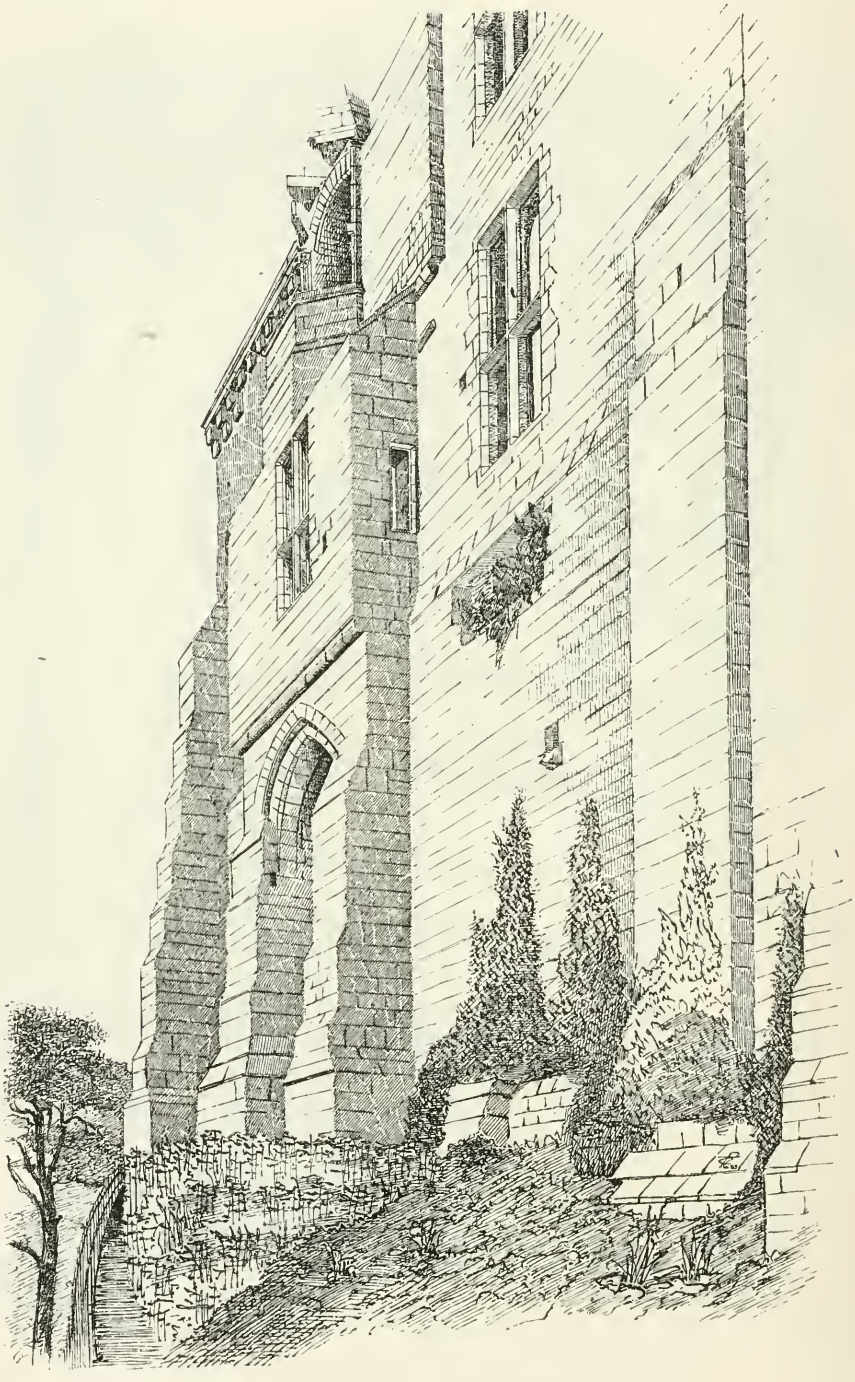


Fig. 445.—Dunfermline Palace. Western Part of South Front.

the storeroom above mentioned under some of the buildings. It seems to have formed a connection between the palace and the abbey, with occasional openings to the surface for ventilation. Several branches radiate from this subway, and there is a central vaulted chamber where these passages meet, one connecting with the abbey, another with the storerooms, and the third with the western extremity of the palace.

After the time of Charles II. the palace was allowed to fall into decay.

BISHOP'S PALACE, Kirkwall, Orkney.

The ancient Bishop's palace at Kirkwall is situated on the south side of the Cathedral, from which it is distant about 30 yards. Between it and the Cathedral is the churchyard and a public street. Entering from the latter the approach to the palace was by an archway about 7 feet 4 inches wide through an enclosing wall. This wall and archway are now removed, the latter being built into a broken part of the south side of the palace wall, about 30 feet from its north end.

The palace is a long narrow building (Fig. 446), partly in ruins and partly inhabited. The ruinous part is 109 feet long by 27 feet 6 inches wide, with a large projecting round tower about 27 feet 6 inches diameter, at the north-west corner. The inhabited portion is 57 feet long, and beyond this the structure has extended at least other 15 feet. Thus the total length of the building has been about 196 feet. Such a long, narrow plan is unusual in a building standing alone. It seems quite likely that it formed one side of a quadrangle, or of an intended quadrangle.

The ground on the west front is lower than the street level on the east side, thus admitting of an arched cellar floor on the lower level entering by the round tower. Above this, in the ruined part, there are two stories and an attic floor, while the round tower, with its square chamber on top, contains five stories, the ground floor being up a few steps above the floor of the main range.

The building is entirely empty inside, with neither floors nor roof. A view of the south front is given by Billings, in which are seen two round arched openings, now built up, with a square central pillar. The position of these may be seen on plan (Fig. 446). This was in all probability the passage into an entrance hall, which would have doors leading off it on either hand. Above this entrance, and resting on the pillar, is the corbelling of a fine ruined oriel, semi-octagonal on plan; and on the opposite side, indicated by dotted lines on plan, is a semi-circular oriel, also seen on view (Fig. 447). From these it will be seen that there is a great similarity in detail to the Earl's palace adjoining, although this palace dates about sixty years earlier. There is a narrow

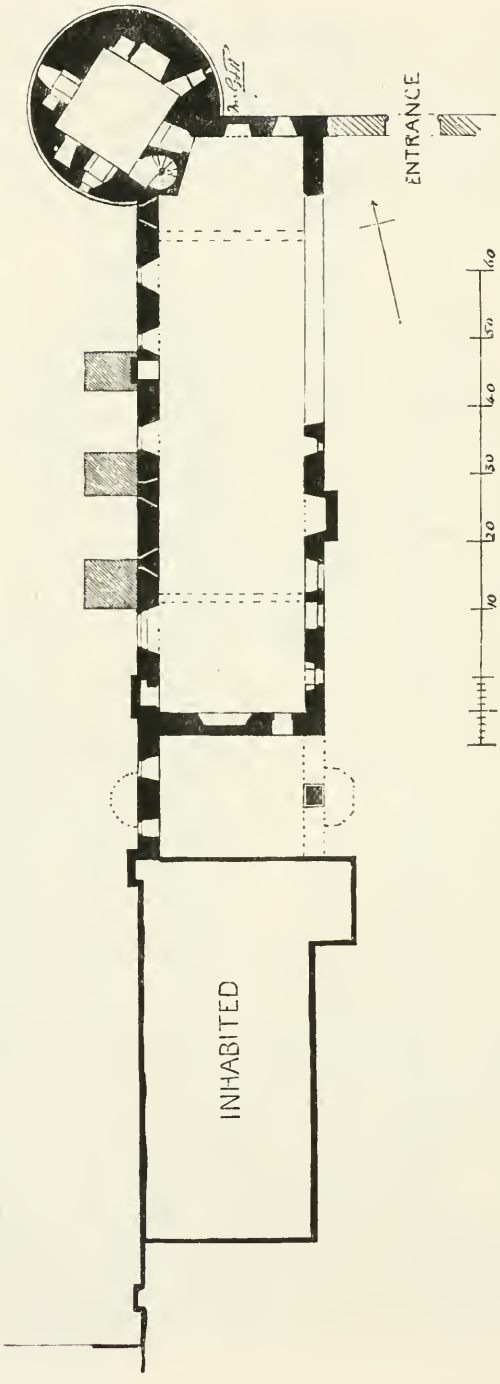


FIG. 446.—Bishop's Palace at Kirkwall, Orkney. Plan.

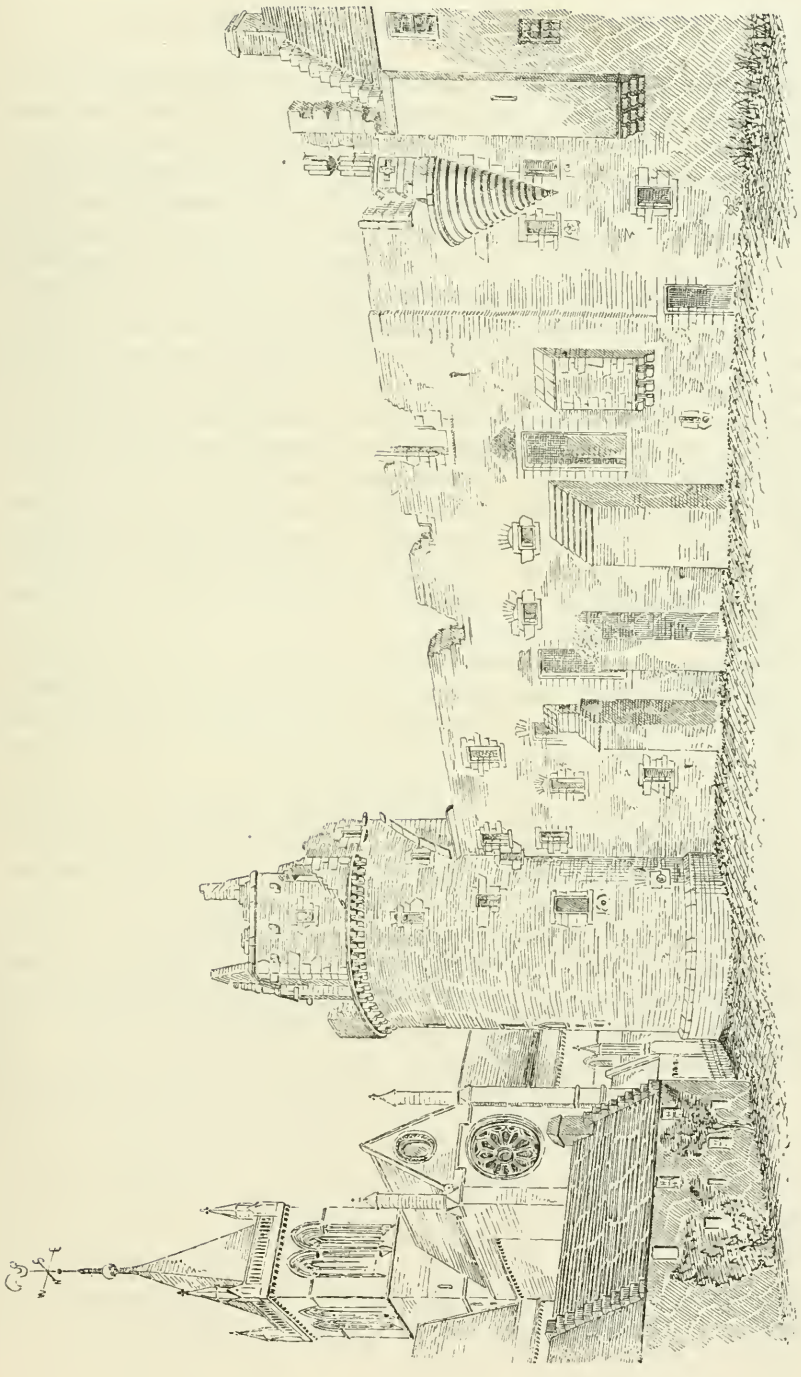


Fig. 447.—Bishop's Palace at Kirkwall. View from the South-West.

entrance (now blocked up) on the east side near the projecting fireplace.

A narrow wheel staircase in the angle of the tower led to all the upper floors, with doors of communication between the tower rooms and the other parts of the building. The rooms of the tower are all square on plan internally, and each is provided with a fireplace, except that on the fourth floor. The square chamber on the top of the tower is remarkable. It is provided with corbels all round, which have evidently supported a lean-to roof, which covered in the parapet walk. We have here, therefore, an admirable example of the process by which the parapets came to be raised, and the eaves of the roof rested on them, so as to convert the space occupied by the parapet walk into rooms. From a minute description of the palace by Sir Henry Dryden, Bart., it appears that in the upper chamber of the palace there is a panel containing a shield bearing the Reid arms, a stag's head, and over it a mitre and the letters R.R. On the north face of the tower outside is an arched panel containing a wasted statue, and beside it another panel with a shield and mitre. This, taken in connection with the shield and initials inside, tends to confirm the popular belief that the statue represents Bishop Reid, the builder of the palace, who occupied the See between 1540 and 1558.

The main part of the palace has been divided into three apartments, which have evidently undergone various alterations, such as the enlarging of windows and alteration of floor levels. Two of the windows on the west side are, it will be seen, very small, and set very high, a plan frequently adopted to admit of furniture, such as a sideboard, being placed beneath them. In the thickness of this wall are two projecting garde-robes, entering from the rooms at a level two or three feet above the ground floor; one of these has been absorbed into a large buttress, as shown in illustrations.

How the upper floors were divided nothing remains to show. The inhabited part is two stories high, and there are indications, as will be seen on Fig. 447, that part of this, as well as the portion we have called the entrance hall, had been continued higher, the oriel, it will be observed, being broken off.

The great square buttresses seen on this view and on the plan are late additions.

THIRD PERIOD—EXCEPTIONAL MODIFICATIONS OF THE KEEP PLAN.

The important castles of Hermitage and Crookston belong chiefly to the fifteenth century. These are exceptional examples of the application of the "keep" plan, and their peculiarities will be explained under the description of each.

There are also a few castles of this period which form an intermediate link between the ordinary keeps and the castles built round courtyards. Such are the castles of Ravenscraig, Morton, Tullyallan, and Rait. These are all buildings of a superior class to the ordinary keeps, and rather resemble the enlarged and commodious keeps of castles like Tantallon and Doune; but although, like the latter, they have courtyards attached to them, there do not appear to have been buildings of importance surrounding the enceinte. They are really enlarged and improved keeps, with extended accommodation, and for the most part with the defences carefully considered. The design and details are also of a better description than those of the ordinary keeps, and have more affinity with those of the Royal castles already described. But these castles, although they have a certain resemblance to one another, and may be regarded as a class by themselves, still vary considerably in the details of their arrangements, as will be pointed out in the descriptions.

HERMITAGE CASTLE, Roxburghshire.

Hermitage Castle is situated about four miles from Riccarton Junction, amongst the wild uplands and morasses of Liddesdale, on a platform of ground on the left side of the Hermitage Water. The reason for the selection of this site has apparently been the fact that two streams join the Hermitage Water at this point, one on each side of the castle. These would give an ample supply of water for filling the numerous ditches which surrounded the castle, the outline of which is still traceable (Fig. 448).

In the thirteenth century the country of Liddesdale was in the possession of the De Soulis family.

Mr. Armstrong, in his *History of Liddesdale,* points out that the original castle of the Lords of Liddesdale was built by Randolph de Soulis, about the time of David I., in a different position from that of the present castle.

It was placed on a strong situation near the junction of the Hermitage Water with the Liddel. Mr. Armstrong gives a plan of this fortress, with

its ditches, etc., and mentions that some years ago a portion of the walls was still standing.

A castle was first built on the present site by Nicholas de Soulis, who lived in the reigns of Alexander II. and Alexander III., or, according to Mr. Fraser, in his *Scotts of Buccleuch*, by Walter Comyn, Earl of Menteith. The erection of the castle was one of the alleged causes of the assembling of an army by Henry III., in 1243, for the invasion of Scotland. He maintained that this fortress was too near the Border (which at that time was the Liddel Water), and would be a constant menace to England. The castle was no doubt originally intended for a Royal fortress, but was afterwards possessed by the lord of the district. On a map of about the year 1300 Hermitage appears as one of the few great fortresses on the frontier.

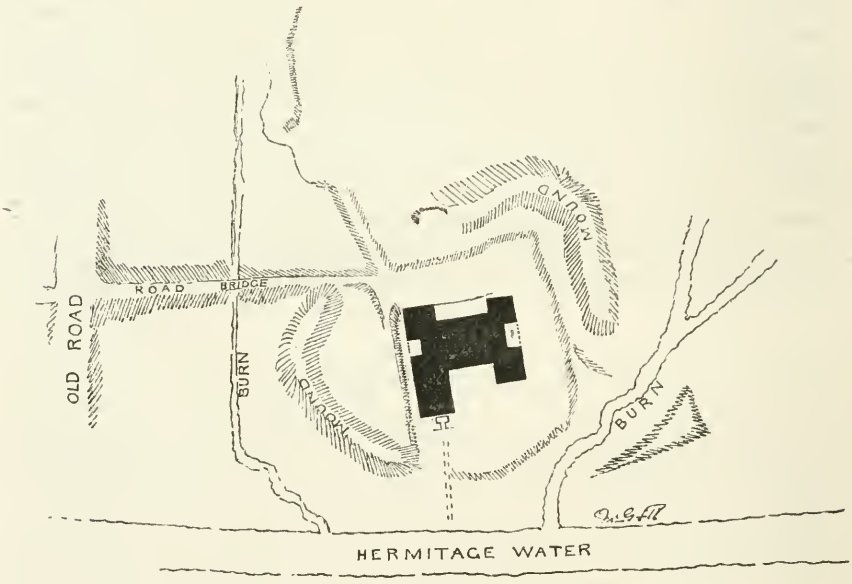


FIG. 448.—Hermitage Castle. Plan of Site.

William de Douglas, Knight of Liddesdale, got a grant of the castle from David II. Thereafter it passed into the hands of the Earls of Angus in 1398, and it is probable that the castle was enlarged by them about the beginning of the fifteenth century.

In 1470, David Scott of Buccleuch was appointed by Angus governor of the castle, and subsequent Scotts held the same office. In 1492, Archibald, Earl of Angus, exchanged Hermitage Castle and Liddesdale for Bothwell Castle on the Clyde.

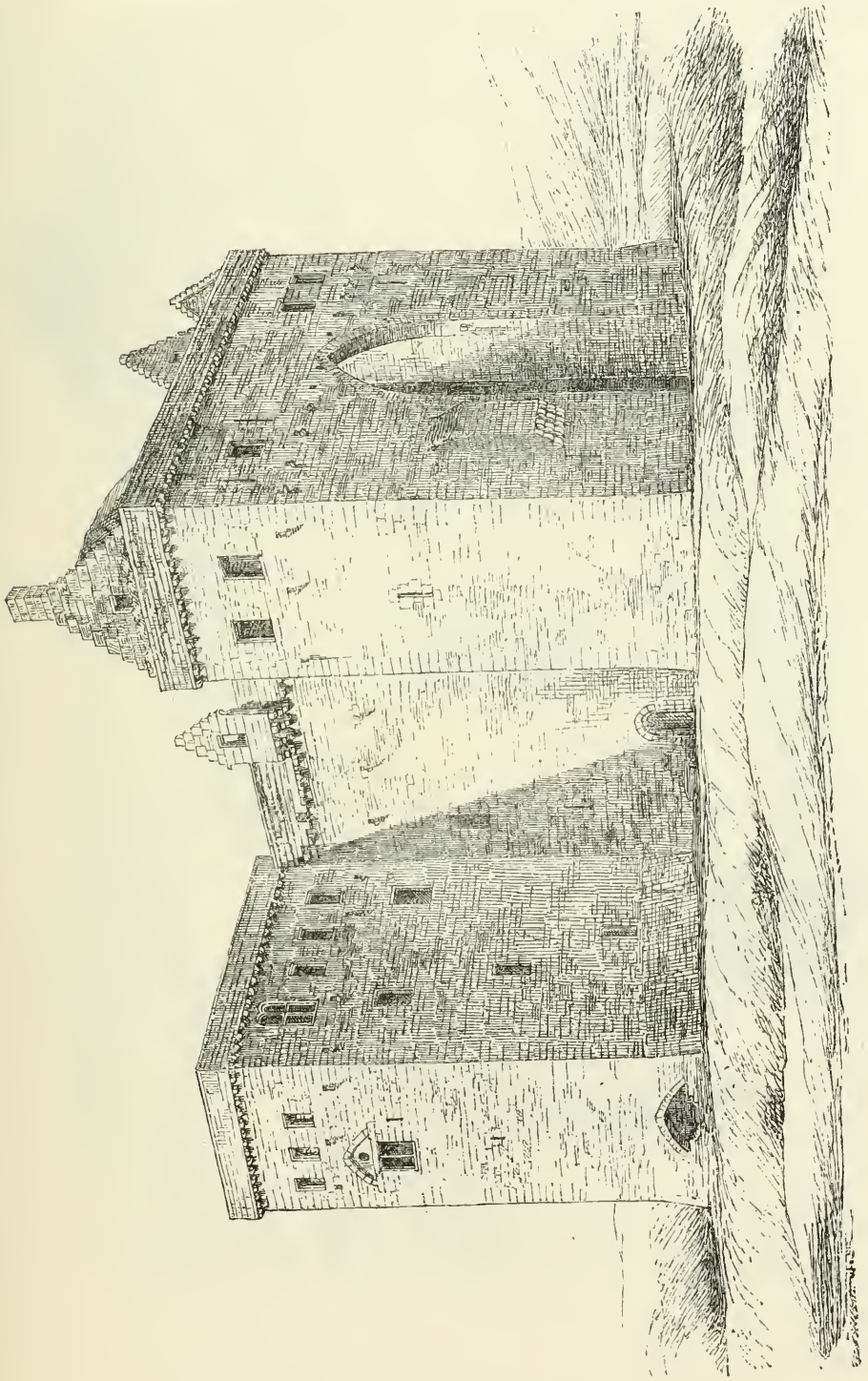


Fig. 449.—Hermitage Castle. View from the South-East.

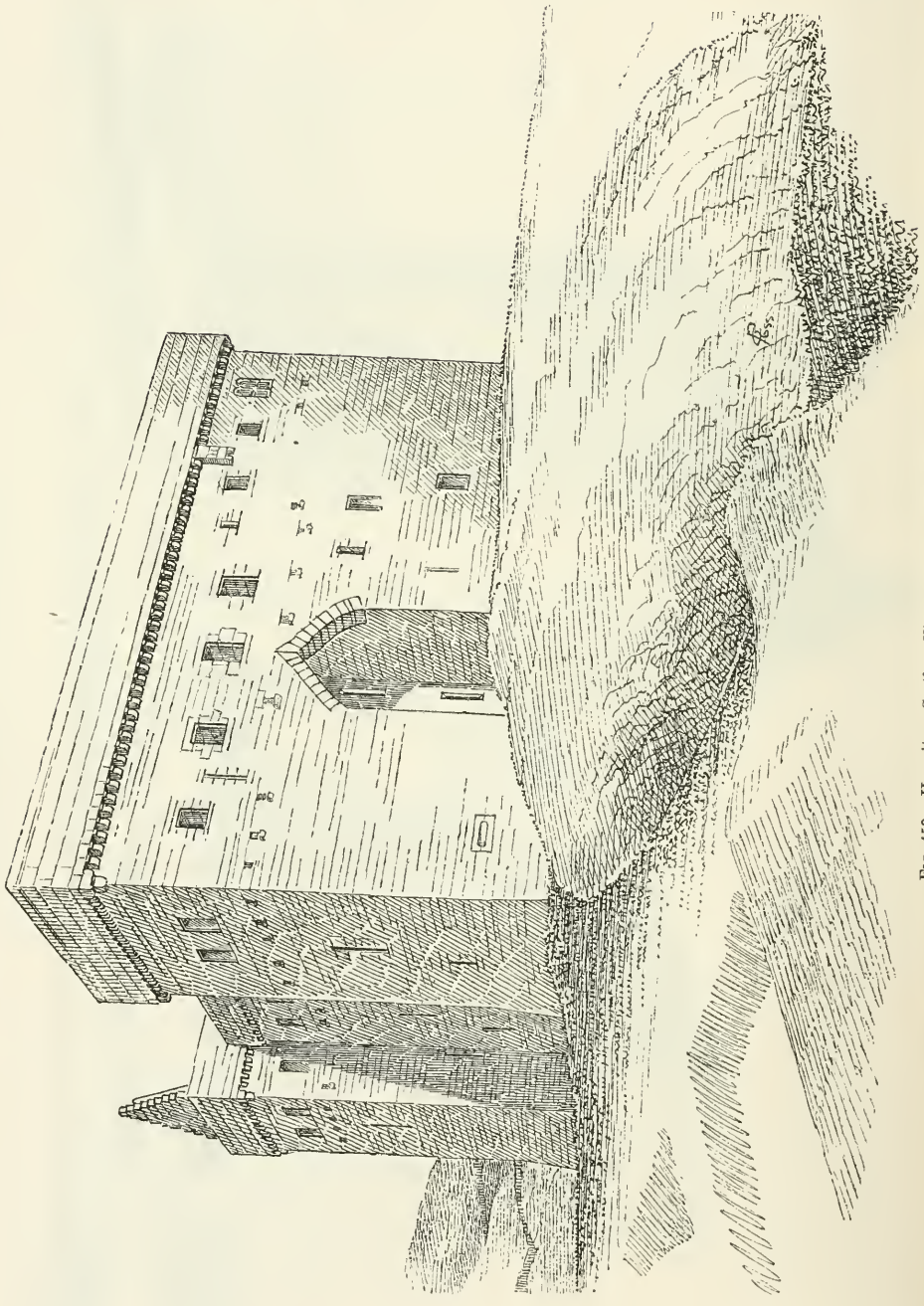


Fig. 450.—Hermitage Castle. View from the North-West.

In 1540 the castle was in the keeping of Lord Maxwell, who repaired it at a cost of £100, and introduced artillery into it.

The castle as seen externally is for the most part probably of the fifteenth century, but there are really few features observable whereby its approximate age may be determined. The exterior is wonderfully perfect, and presents a very striking contrast to the interior, which has been almost entirely demolished. The external character (Figs. 449 and 450) has considerable affinity with such castles as Doune, part of Dirleton, Tantallon, etc.

It has the same massive walls, built with strong partly coursed rubble-work, the same numerous and large apartments; but it differs from them in not being built round a quadrangle such as would be formed by erecting buildings against a wall of enceinte. Indeed there is difficulty in detecting traces of a regular wall of enceinte.

There have, no doubt, been enclosing walls and ditches, but these have been all altered at a later date, in order to adapt them to artillery.

To ascertain their true character excavations would be required, as the enclosures and ramparts are now reduced to green mounds, some of them however of considerable size and extent.

On entering by the existing doorway (marked "postern" in Fig. 451), which is modern, but in the place of an old one, we find ourselves in a small courtyard, 25 feet 9 inches by 14 feet 2 inches, enclosed with what are evidently very ancient walls (shaded black on Plan, Fig. 451), only one story of which now remains (Fig. 452). These are carefully built with red freestone ashlar, and the side walls have each a plain flat buttress in the centre. The doors and windows all open into this courtyard, and have broad splays, the doors having semicircular arches, and the windows square lintels externally (with a central mullion), while the window recess is arched, with splayed ribs (Fig. 453). The lower flight of the newel stair is of the same date, the steps being built into the wall, while the steps of the continuation of the stair to the upper floors, which is more recent, were not built into the wall, and have all been removed. On the inside of the walls opposite the buttresses there are large corbels (Fig. 453) forming the springing of arches which spanned the apartments, and carried a wooden floor (as in the basement of the donjon at Bothwell).

This would appear to be a remnant of the original castle erected by Nicholas de Soulis before 1244. What its complete plan was we have now no means of knowing, but it is probable that the castle which next occupied this site, and which incorporated the existing portions of the old walls, was built on the old foundations.

This may have been erected by William Douglas, Knight of Liddesdale, in the middle of the fourteenth century, who would naturally erect a rectangular keep in the style then prevalent. But having the walls

of the old castle to deal with, the usual form had to be modified, the result being that the keep assumed the very uncommon form of a double tower with a small central courtyard (shown by cross hatching on Plan).

The next transformation of the castle's appearance was effected by the addition of the towers at the four angles. This extension of the castle probably took place early in the fifteenth century. It was then

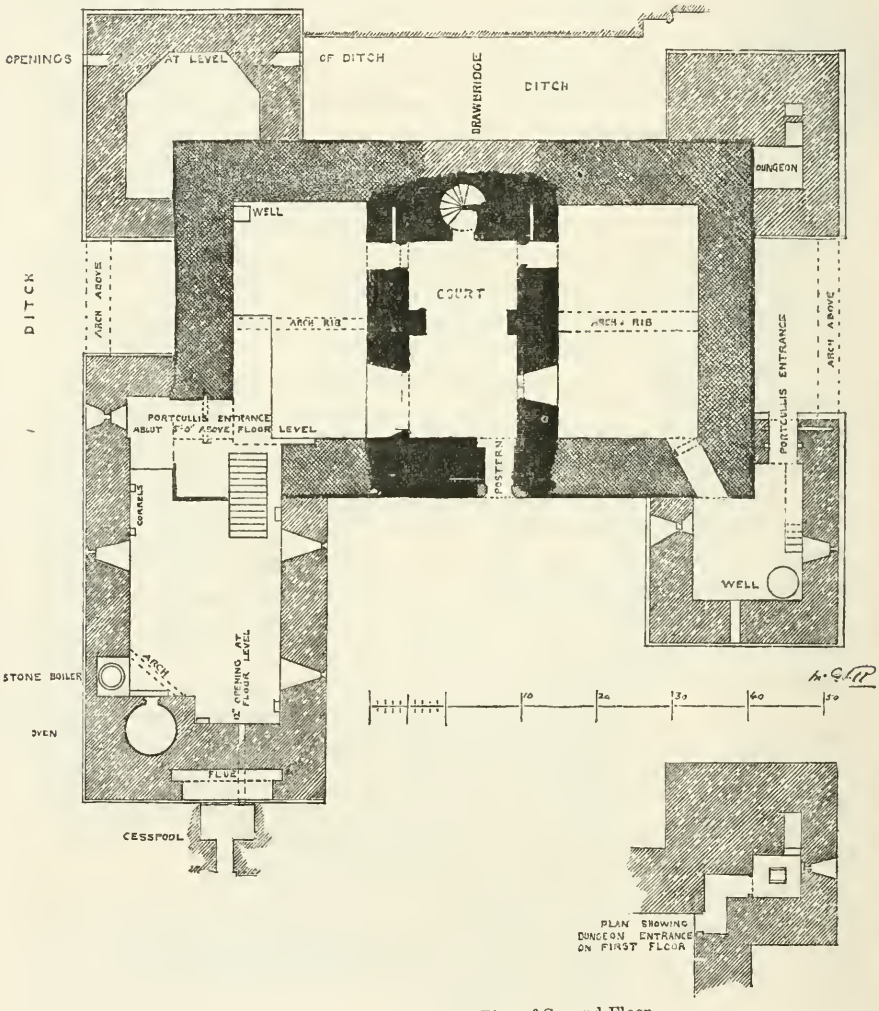


Fig. 451.—Hermitage Castle. Plan of Ground Floor.

that the simple keeps began to be extended by buildings round the courtyards, and when castles containing large and numerous apartments, such as Doune, were erected. Here we have the same result produced

in a different way by the erection of additions at the four angles. These

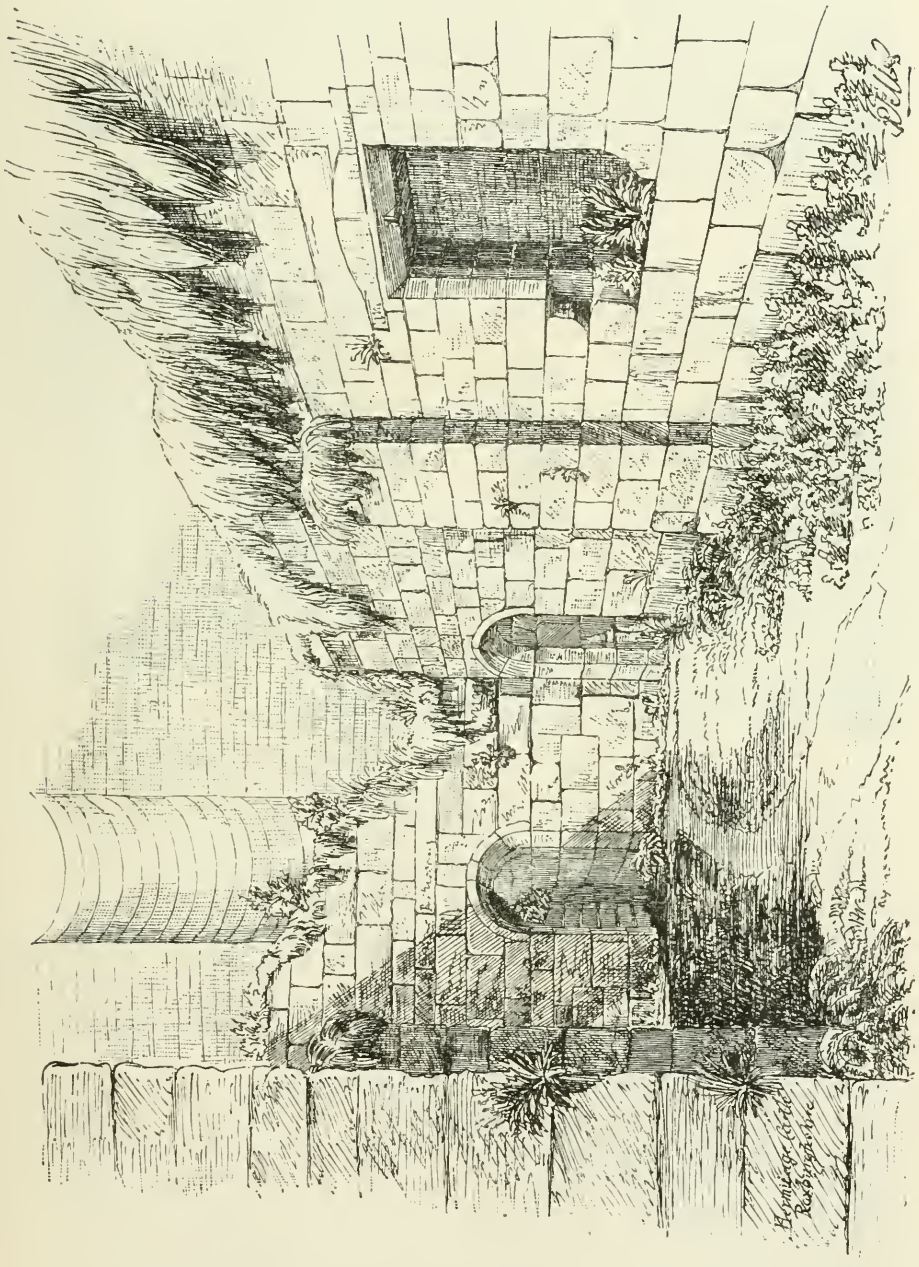


Fig. 452.—Hermitage Castle. Interior of Courtyard.

not only provided the extended accommodation required, but also served

to defend the building as flanking works. There can be no doubt that these towers are additions, as three of the square angles of the earlier oblong keep jut into the corner towers in a way they would not have done had they formed part of the same design. A wet ditch was also introduced between the two northern towers, and the drain from it under the north-west tower still exists. The ditch was probably carried round the west side also.

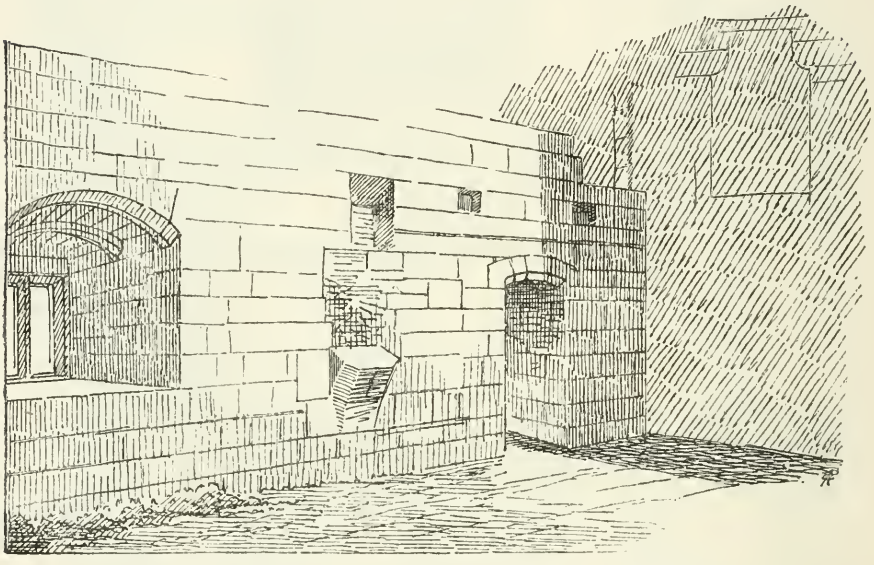


Fig. 453.—Hermitage Castle. Interior of West Wall of Eastern Division.

The north-east tower contained a dungeon with vaulted roof and small hatch (detached Plan, Fig. 451). In it and in the small guard-room above there are garde-robes. Tradition points to this small dungeon as that in which the Knight of Liddesdale confined Sir Alexander Ramsay, Sheriff of Teviotdale, until he was starved to death. But this scarcely carries out the whole story, according to which Sir Alexander was enabled to live for some time on the grains of corn which fell through the floor of a granary above his prison. Here there is only a very small stone hatch in the vault, and no granary above.

The south-east tower contained a circular draw-well, carefully built with ashlar, and with a drain through the wall adjoining. It now measures 9 feet 6 inches to the surface of the water. This tower also contained a postern door, which had an outer door with sliding bar, and within it a portcullis. A small stair leads from the well-room to the place for working the portcullis, and was continued to the floor above.

The south-west tower or wing is much larger than the other towers, and seems to have contained the private apartments of the warden. On the ground floor there still remains a large oven 7 feet in diameter, and,

recessed in the adjoining wall, there is a singular stone boiler or tub, built of most careful masonry, and fashioned exactly like the coppers used in washing-houses for boiling clothes; it measures about 3 feet 7 inches in diameter, and has an aperture beneath on the floor level. This structure and the oven are situated in the south-west angle, and are contained under a diagonal arch, shown by dotted lines on plan, Fig. 451. This has obviously been the bakehouse. It has a good stair leading down to it from the western entrance door hereafter described. The upper floors have large windows, more ornamental than usual (Fig. 454), and there seems to be no doubt that these were the principal family apartments. The vents of the fireplaces are curiously all carried up in one corner. Owing to the entire gutting of the interior, no trace is found of the kitchen or the hall. The latter must originally have occupied one of the divisions of the central castle, but would probably be on the first floor of the south-west wing after it was built.

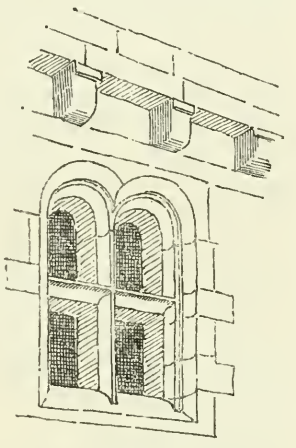


Fig. 454.—Hermitage Castle. Upper Windows of South-West Wing.

The arrangement for the garde-robes or latrines at this point is peculiar. An aperture in the thickness of the wall receives the vents, which conduct through an arched opening to the outside, where there is a carefully built and vaulted cesspool with door, and there no doubt was a drain to the river. The drain from the bakehouse also leads into this cesspool.

The north-west tower contains an access by a carefully constructed doorway on an upper floor into the space between it and the south-west wing. A pointed vault still remains at the roof level over the south-east and north-west towers, and it seems likely that the whole top story was vaulted and covered with a stone roof.

One of the most striking features of the building externally is the great pointed arches which unite the two eastern and the two western towers. Such arches were not uncommon over gateways which entered between towers, but here there are no such gateways, the only opening on the ground level in any of the towers being the small postern in the south-east tower already referred to. The arrangement seems to have been in connection with the defences. These were principally situated at the top of the building. It will be observed that there is a row of openings like gargoyles all round the castle, about the level of the floor of the top story, exclusive of the attic in the roof. Each opening has a large projecting corbel under it, and has undoubtedly been intended for the insertion of a putlog to carry a hoarding. There are doors also leading from the top story to the hoarding at the proper level, and the

windows of that story have all gibblet checks on the exterior, so that they might be protected by wooden shutters, when the hoardings were erected, and the castle was undergoing a siege.

The arches between the towers would enable these hoardings to be carried straight across the east and west fronts, where the recess between the towers is too narrow for the hoardings to be returned round the recess.

But these recesses seem to have been still further utilised for defensive purposes. There are corbels at three different levels under the western arch, showing that there were floors inserted at these levels, and the door from the north-west tower above mentioned leads into one of these floors. Several tiers of defenders could thus be placed in good positions for assailing the enemy, without exposing the castle to any danger from large windows or other openings in the walls, for these defences were all really outside of the main building. With these appliances, and the hoarding all round the upper story, and the battlements round the roof, without taking into account the wet ditches and outworks, this castle must have been an unusually strong one for defence.

The arch between the two eastern towers had fallen at the beginning of this century, but has been rebuilt, evidently in much the same position and form as it originally occupied.

There would seem to have been an unusual number of entrance doors in this building. First, there was probably a postern at the ground level into the small courtyard where the present door is. Another postern was introduced, as above mentioned, in the south-east corner tower. At the west end of the castle, on the first floor, there has been a portcullis, one groove for which still exists quite perfect, the other groove having been removed along with part of the wall when the south-west wing was added. This undoubtedly marks the position of an entrance door, situated, as usual at the time, on the first floor.[1]

There would appear to have been a third door in the centre of the north wall, also on the first floor level, entering to the newel stair, from which access could be had to either portion of the double tower by small stairs and passages, which can still be traced. But this door has long been built up. At the north-west angle of the main building there is a square pit, which appears to have been a draw-well ; but from the entire demolition of the interior walls it is impossible to make out the arrangement of the plan.

There are no windows in the external walls on the ground floor, and the original windows on the upper floors have been very small. The apartments were probably lighted by windows into the small court,

[1] Mr. Armstrong has been good enough to point out that there are indications of the grooves for another portcullis in the outer wall to the west of the above portcullis, and that that corner of the south-west tower is therefore probably older than the remainder, and contained the entrance door to the castle, which was thus defended with two portcullises.

similar to those which still exist in the ancient walls on the ground floor. There are two loops in the south wall adjoining this court, the form of which indicates an ancient date.

As above mentioned, Lord Maxwell repaired the castle in 1540, and introduced artillery.

There are various signs of his handiwork easily traceable. The horizontal loopholes for guns which occur in various parts of the castle are clearly insertions, windows and doors having been built up to receive them.

The large mound at the west end of the castle, which still retains traces of walls, has probably been a bastion erected in advance of the castle to receive guns; but it is impossible in its present state to make out its form or construction.

CROOKSTON CASTLE, Renfrewshire.

Situated on the top of a small hill or knoll about three miles south from Paisley, this castle forms a conspicuous object in the landscape.

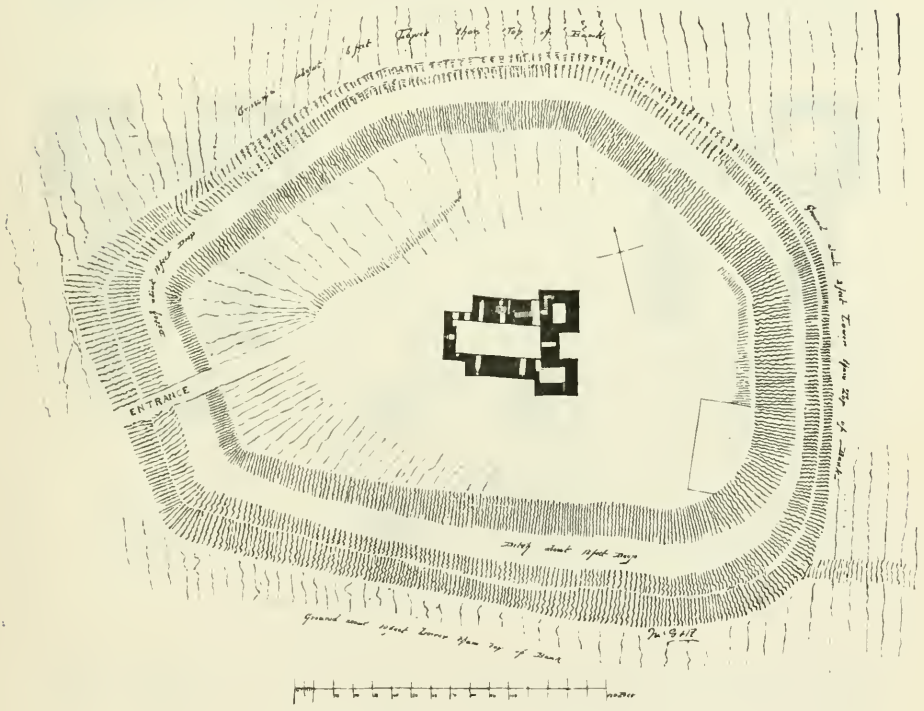


Fig. 455.—Crookston Castle. Plan of Site.

The estate belonged in the twelfth century to Robert de Croc, and in 1330 was purchased by Sir Alan Stewart, and granted in 1361 to

J. Stewart of Darnley. It thus came to be held by his descendant, Henry, Lord Darnley (1546-67). The late proprietor, Sir J. Maxwell of Pollok, had the ruins put in good repair, and the top of the tower rebuilt some years ago.

There is no record of the date of the erection of this castle, and it is generally supposed to belong to the thirteenth century. It is not unlikely that the site was occupied with a castle at even an earlier date. The great ditch (Fig. 455) and mound, which still surround the summit of the hill, seem to point to this as one of the ancient fortresses whose site and defences were made available in connection with a castle of later date. Some of the features of the existing castle, such as the great thickness of the walls and the carefully built vault of the basement, with its bold projecting splayed ribs, certainly indicate considerable antiquity, but the distinguishing features of the thirteenth-century castles are entirely wanting. There is no great wall of enceinte with towers and donjon, but simply a central keep, no doubt of a somewhat unusual plan, but still analogous in almost all its features to the castles of the fourteenth and fifteenth centuries, such as Dundonald, Borthwick, and Hermitage.

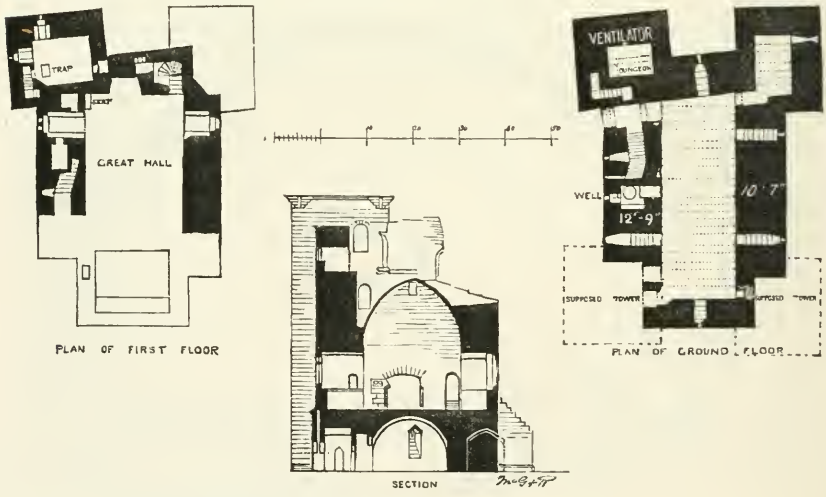


Fig. 456.—Crookston Castle. Plans and Section.

Thus the main block of the castle (Fig. 456) is a parallelogram 60 feet long by 40 feet wide, having on the basement the finely vaulted hall (Fig. 457) above referred to. One of the ribs is raised at the haunch in a peculiar manner to give height for the door (Fig. 456B). Over this vault is the great hall, with pointed vault 28 feet high (Section, Fig. 456), and the usual large fireplace, and windows with stone seats.

There is one square tower still existing at the north-east corner, and the remains of a similar tower at the south-east corner (Fig. 458). From the arrangement of the door, which opens outwards, and the thinning of the walls at the west end, it seems probable that there were two corresponding towers at the north-west and south-west angles, as shown by dotted lines on the plan of the ground floor. The plan of the castle would in this respect resemble that of Hermitage. Over the door, from the basement into the north-west tower, there is a hole or machicolation in the wall, from which missiles might be cast on assailants below. This is shown on the plan of the first floor, Fig. 456.

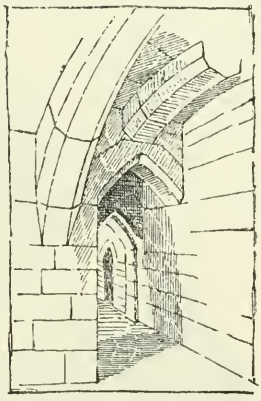


Fig. 456B.—Crookston Castle. Springing of End Rib.

The entrance door (Fig. 459), which is on the ground level, adjoins the north-east tower, and has been strongly defended with two doors and a portcullis, the inner door having the usual sliding bar, which, when drawn back, crosses

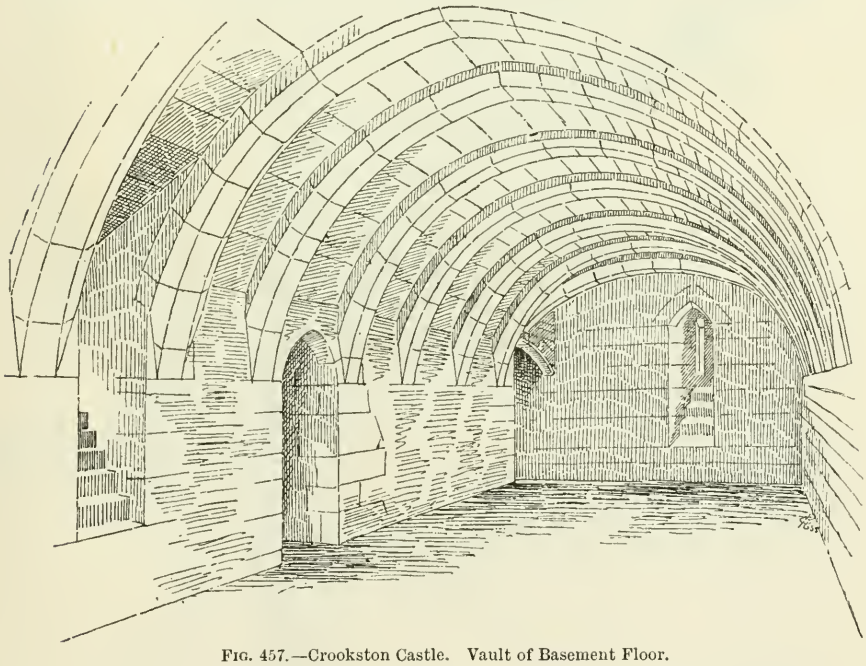


Fig. 457.—Crookston Castle. Vault of Basement Floor.

the staircase of the north-east tower at such a level as to prevent entrance by it. The doorway projects from the face of the wall, so as

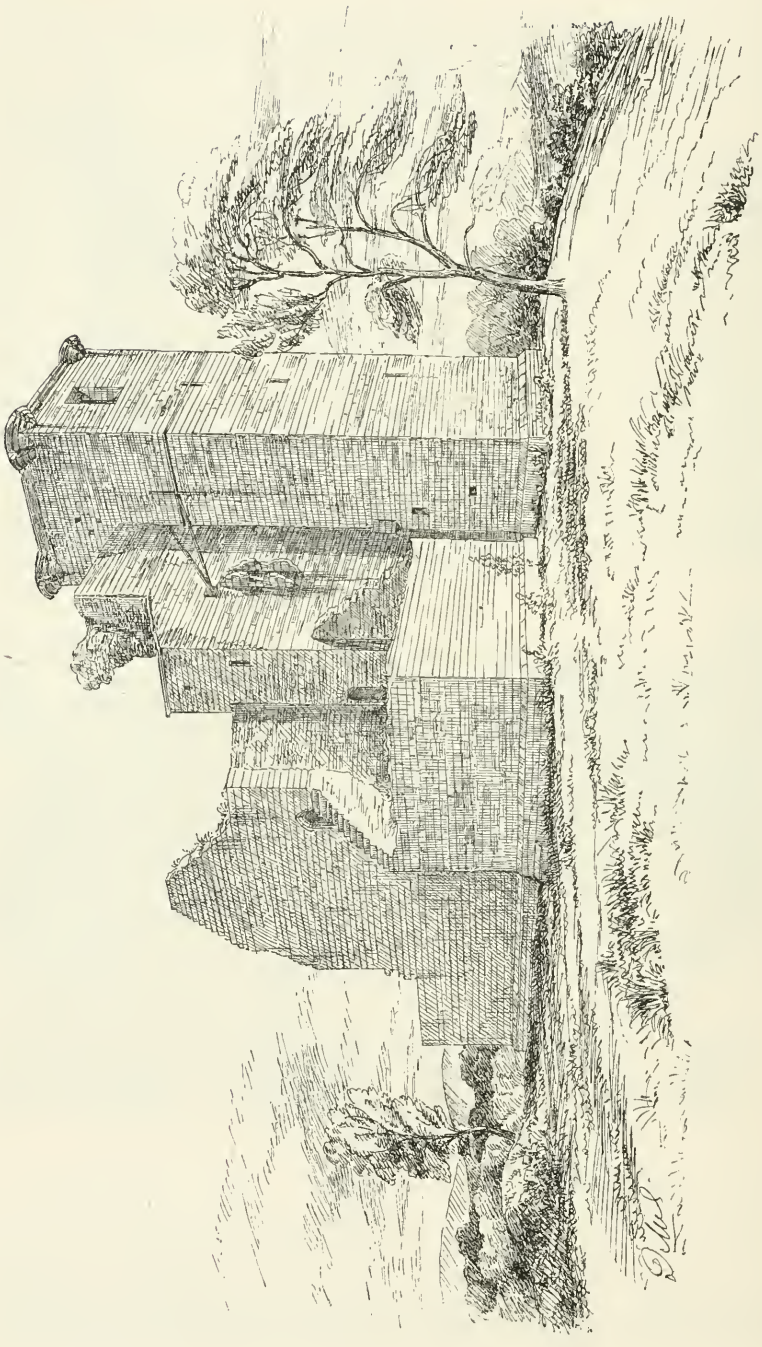


Fig. 458.—Crookston Castle. View from the South-East.

to leave ample room for the portcullis (see Section), and the latter was probably worked from the window of the hall above. There has evidently been some alteration of the floor in this window. It must have originally been about 3 feet higher, so as to suit the side seats, which are now 4 feet 6 inches above the floor. There may have been steps up to it, such as there still are to the windows in the basement. A little west from the entrance door there are three long holes (Fig. 459), one over the other, from the outside running through the wall, as if for sliding beams. These were probably in connection with some other defence of the entrance doorway now obliterated.

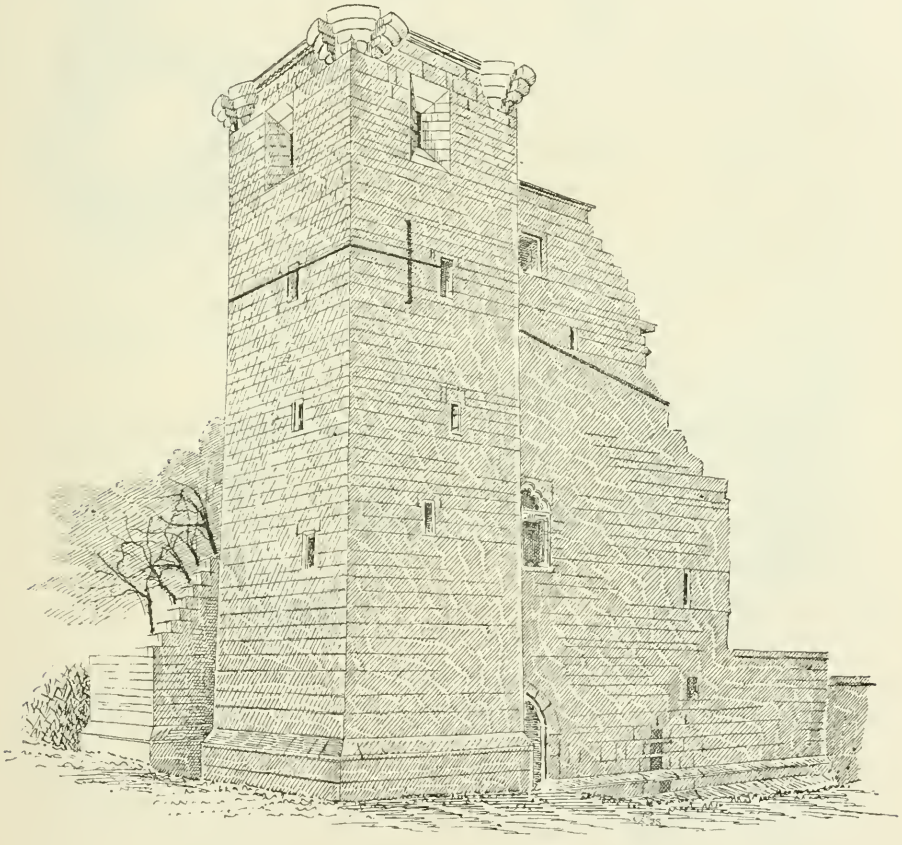


FIG. 459.—Crookston Castle. View from the South-West.

A straight stair in the thickness of the wall leads from the entrance door to the hall, and under this stair, in a well-finished chamber entering from the basement, is the well. The old wooden windlass is still to be seen lying at the bottom of the well.

A small stair in the wall of the north-east tower, already referred to in connection with the bar of the entrance doorway, leads to a guard-room in the tower, under which, entering from a trap in the floor, is the vaulted dungeon, with the usual small aperture to the exterior for ventilation. In the basement of the south-east tower is a cellar, vaulted with ribs similar to the hall of the basement. The access to the upper floors of the south-east and north-east towers is by a newel staircase entering at the south-east corner of the great hall, from which passages run in the thickness of the east wall to the north-east tower. This stair has also conducted to the apartments over the great hall, where remains of a moulded fireplace and mullioned window may be traced.

The upper part of the north-east tower is new, having been restored, as above mentioned, by Sir J. Maxwell. A portion of this tower near the base is also new, having been cut out when it was at one time intended to blow up the tower!

Amongst the most interesting features connected with this castle are the great ditch and mound surrounding it, which are in a wonderfully good state of preservation. The ditch is about 12 or 13 feet deep, and the mound on the outside of it is still raised several feet (varying from 2 feet to 10 feet) above the level of the surrounding ground. Being on the top of the hill, the ground beyond the ditch slopes pretty steeply away from it, so that the mound when covered with a formidable palisade, as it no doubt was, would afford a secure defence. A very old hedge now grows on the top of the mound.

The entrance has been at the south-west angle, and would be defended with gates and drawbridge. The ground enclosed within the mound extends to about two acres. There are no outbuildings remaining, but traces of foundations are visible at the south-east corner of the enclosure, as shown in Fig. 455.

RAVENSCRAIG CASTLE, Fifeshire.

Ravenscraig Castle, situated between the towns of Kirkcaldy and Dysart, stands on a rocky promontory running out into the Firth of Forth. On three sides it is protected by the sea, from which the rock rises sheer up about 100 feet, while on the north or land side the promontory is isolated by a wide ditch, now partly filled up. The building (Fig. 460) belongs to the middle of the fifteenth century, and is all of one age. It consists of a keep at the north-west angle (Fig. 461), presenting a rounded front towards the mainland. A curtain extends eastwards from the keep for 53 feet, where it joins a projecting round tower 44 feet in diameter, forming the north-east angle of the castle. This tower is similar in outline to the keep, but not so high. It rises, however, from a lower level, and contains the same number of floors, two

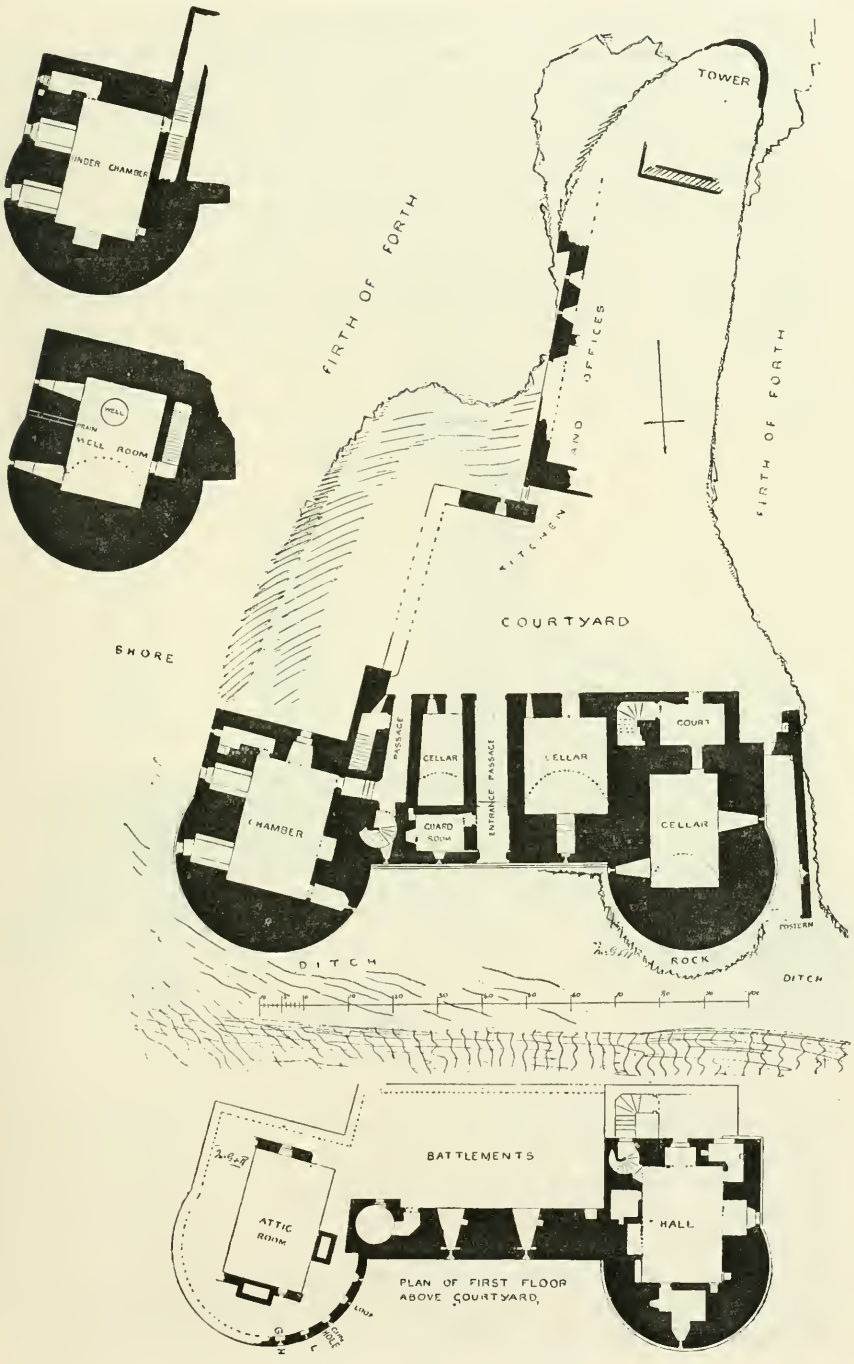


Fig. 460.—Ravenscraig Castle. Plans.

of which are below the level of the courtyard (Fig. 462), but are above the ground outside nearly all round. The entrance is in the centre of the curtain, through a broadly splayed round arched doorway (Fig. 463) some 8 or 9 feet above the ditch, which was no doubt crossed by a moveable wooden bridge leading to the doorway. The door was secured by a sliding bar, exposed when drawn back, in the guard-room adjoining. This room is provided with a fireplace, and lighted by a long narrow slit. The vaulted entrance passage, 35 feet long and 7 feet wide, leads to the courtyard. On either side of the passage, and behind the curtain, are vaulted cellars. These cellars project 12 feet into the courtyard beyond the inner face of the keep, and this space opposite the keep is occupied

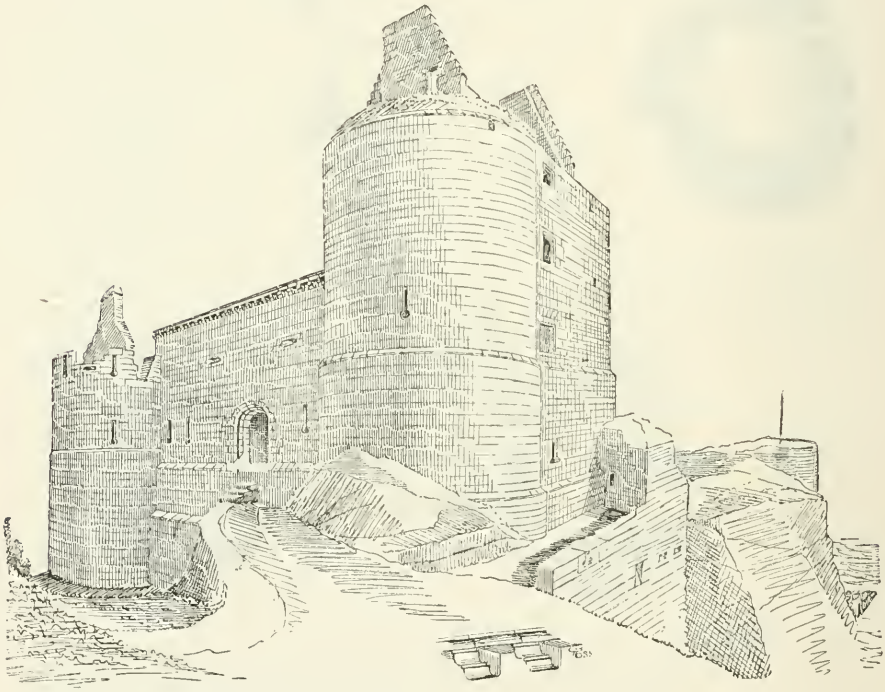


Fig. 461.—Ravenscraig Castle. View from the North-West.

by a fore court and staircase leading to the first floor. This staircase, as well as the vaulted basement of the keep, are protected by the outer door of the fore court, which has a portcullis groove on one side (the other side having been altered and rebuilt), as well as by other doors at the entrance to the staircase and to the basement. At the top of the fore stair, and in the south-east corner of the keep, a newel stair leads to the two upper floors and an attic. The first floor (Fig. 460) contains the hall, 26 feet by 18 feet, with a large fireplace and three mural chambers. Over this (Fig. 462) was a similar upper or private hall, and

above it the third floor and the battlements, probably with a guard-room entering off them. The top story has at a more recent time been altered, and the battlements built solid, and sloped off with a wide coping (Fig. 464). There can scarcely be any doubt as to this being an alteration. The crow-stepped gables of the roof look like a late addition, and the sloped-off top of the thick wall of the keep would be quite meaningless in connection with a defensive keep of the period of Mary of Gueldres, although quite in keeping with the later date when the gables were built, and when defence was no longer an object of serious importance. All the floors here and throughout the castle were of timber, except the ground floors, which were vaulted. Each floor is provided with wide window recesses, and good windows looking over the precipitous parts of the site, but towards the landward side nothing is visible but solid plain walls with narrow loopholes. At the west end of the keep are the latrines, with shoots over the rock.

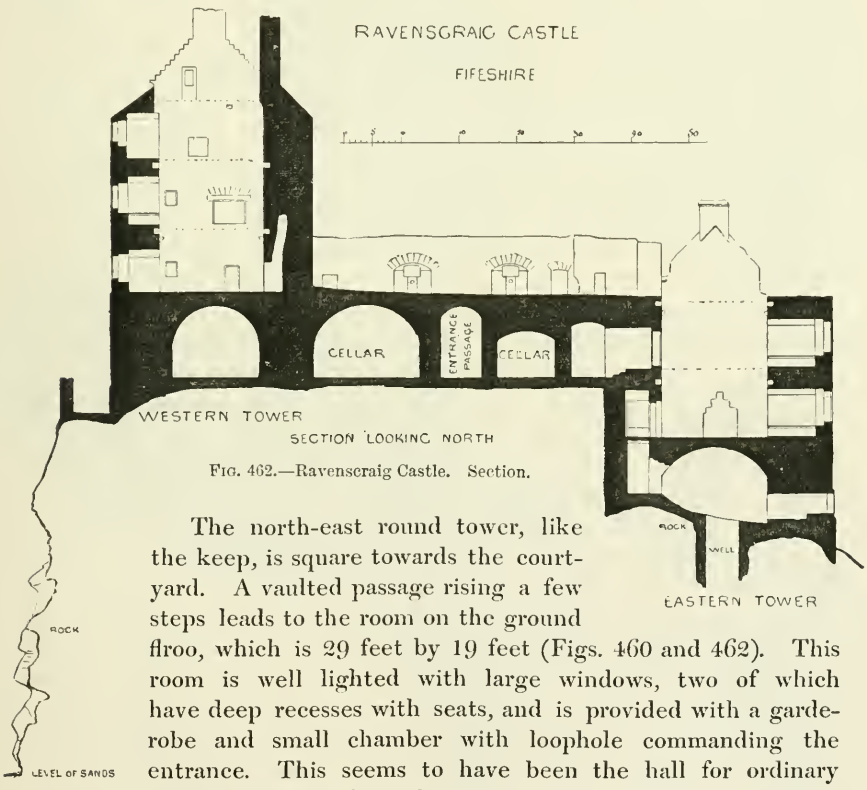


Fig. 462.—Ravenscraig Castle. Section.

The north-east round tower, like the keep, is square towards the courtyard. A vaulted passage rising a few steps leads to the room on the ground flroo, which is 29 feet by 19 feet (Figs. 460 and 462). This room is well lighted with large windows, two of which have deep recesses with seats, and is provided with a garderobe and small chamber with loophole commanding the entrance. This seems to have been the hall for ordinary use, that in the keep being probably reserved, along with the other chambers therein, as the private apartments of the proprietor. The above passage also gives access to the turnpike leading to the

upper floors and battlements of this wing, as well as to the battlements behind the curtain over the entrance passage and the curtain cellars (Fig. 462). In the thickness of the east wall of the vaulted passage a straight stair leads down to the first floor below the hall, and continues in almost total darkness straight down to the well-room on the second floor. The latter is a lofty vaulted apartment partly cut out of the rock, and lighted by two long slits. The well, about 6 feet in diameter, is, as usual, filled up. In order to keep the chamber dry a drain is placed at the floor level, which is several feet above the ground outside.

The walls, both of the keep and the north-east tower, have a thickness of 14 feet towards the north or exposed side of the castle. They have no doubt been made of this extraordinary thickness for the purpose of resisting artillery, which was then beginning to be employed. The guns, however, were of small calibre, as may be observed from the size of the horizontal embrasures in the walls and battlements. The battlements on the eastern round tower are of considerable breadth. Owing to the thickness of the walls a space of about 10 feet in width has been obtained, without the necessity for projecting the parapets. These are carried up flush with the face of the wall, and where they are entire on the circular tower, they are pierced with narrow upright loops and horizontal splayed gun-holes alternately. The parapet of the keep was probably finished in the same way originally, or it may have had a boldly corbelled and machicolated parapet like the towers of Caerlaverock, or a parapet pierced with sloping gun-holes like the south-east tower at Craignethan.

There appears to have been an open paved platform over the entrance passage, and the cellars on each side of it, while the curtain is carried up about 10 feet high and 12 feet thick as a screen wall, and is pierced with two horizontal embrasures for guns. These embrasures are reached from the interior by wide-arched and splayed recesses like the ingoings of a window, each recess having a small ambry for ammunition. There is also in each recess, and below the level of the embrasures (where shown on Plan, Fig. 460), a slot-hole on each side some 5 or 6 inches square, and about 15 deep. These were in all probability intended to receive the ends of the bars to which the guns were attached to prevent their recoil, as was done in the old men-of-war ships. The top of the curtain wall is ornamented on the outside with a row of shallow corbels (Fig. 461), having a moulding above, and was probably finished with a high parapet and a broad parapet walk. The height and strength of the battlements of this curtain may be explained by the circumstance that the ground in front of the curtain and round towers rises rapidly from the ditch, and

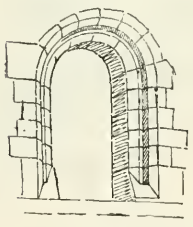


Fig. 463.—Ravenscraig Castle. Entrance Doorway.

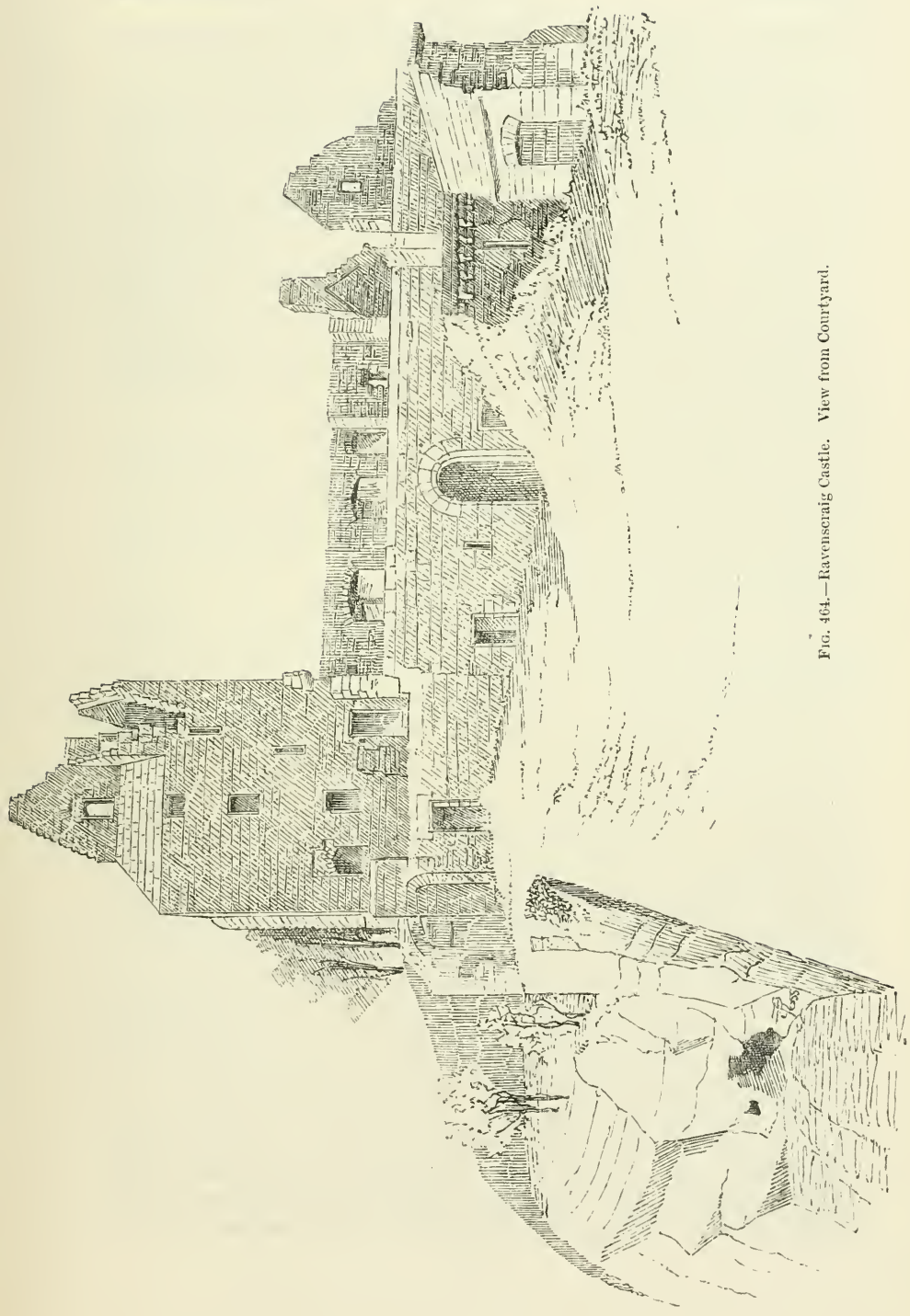


Fig. 464.—Ravenscraig Castle. View from Courtyard.

overlooks the castle. The parapet wall on the side of the platform next the courtyard does not now exist.

The enclosing walls round the top of the rock, which are of irregular, wedge-shaped form, remain only in portions here and there. They have been ornamented with corbels similar to those of the curtain. Within these walls were offices, now all ruined, the foundations only being traceable ; but several windows on the east side, overlooking the sea, indicate the existence of extensive buildings. In all likelihood the kitchen was in this quarter, as there is no appearance of one in the main buildings.

At the extreme point of the rock are the remains of a rounded bastion, and at the north-west corner there seems to have been a postern entering from the ditch, the rybats of one side of which still remain. The passage from the postern is between the keep and enclosing wall, and has long been built over. A wall on the very edge of the precipice above the beach is loopholed.

The appearance of Ravenscraig from the shore is most majestic, and the ruin, being in tolerable preservation, is well worthy of a little care. Its aspect would be greatly improved by being roofed, and its preservation at the same time would thus be best secured. The eastern battlements are all overgrown with trees and shrubs, which in a short time will bring this part of the castle to the ground.

In the preface to the Exchequer Rolls of Scotland, vol. vii., edited by Mr. George Burnett, Lyon King of Arms, the following admirable sketch is given of the various incidents connected with the building of Ravenscraig by James II. and his Queen, Mary of Gueldres :—

"The most extensive work carried on by the Queen, to which a large share of her income was devoted, was connected with the Castle of Ravenscraig. It was probably James II. who conceived the design of placing a Royal castle on the cliff that protrudes into the Firth of Forth near Dysart. On 8th March 1459-60, five months before that King's death, the lands of Dysart, specified as Wilstoune, Carbarry, and Dubbo, and of which this rocky promontory formed part, were resigned in the Queen's favour by Walter Ramsay and Janet, his wife, who held them as vassals of the Earldom of Fife, they getting in exchange Crounerland, Manuelrig (the colliery excepted), and Gilleisland, near Linlithgow.

"In the Linlithgow Accounts of 1466, 1468, and 1469, Crounareland is said to have been granted to Archibald Ramsay (the successor of Walter) in exchange for Ravenscraig. The same family of Ramsays are afterwards designed from the lands of Dunnone, in Forfarshire.

"The building operations, begun at the very commencement of Mary's widowhood, were carried on with great vigour under the direction of Master David Boys as Master of Works. In the Accounts of the Queen's lands and fermes for 1462 and 1463, Boys receives for this building sums amounting together to £600. Other entries tell us of

the bringing, in the year 1461, of fourteen great timbers called 'joists' from the woods on the banks of the Allan to Stirling at a cost of 7s.; of Andrew Balfour (elsewhere met with as Clerk of the King's Wardrobe) getting £2, 10s. for cutting and planing them and transporting them to Ravenscraig, six more joists remaining in the wood in charge of said Andrew.

"We have a large supply of oats from Fife for horses transporting building stones to Ravenscraig. The already mentioned Lesouris [mentioned in previous extracts not quoted here] is repaid £10, 4s. for his purchase of 'joists' and boards for the same building. Two cart-wheels, price £1, 4s. 6d., are sent from Cupar to Ravenscraig, and a boat is hired to convey timber from Menteith to the works there. The custumars of Perth send two joists and two 'rudis' of timber, costing £18, 2s. 4d., to Ravenscraig, and pay 5s. 9d. for their carriage. In 1461 the buildings were so far advanced that Kinghorn, the Queen's Steward, spends twenty-five days there, along with other servants (familiarii) of the Queen; and Robert Liddale (encountered in the previous reign in the various characters of Keeper of Tantallon Castle, King's tailor, constable of Dunbar Castle, ranger of Yarrow, and bailie of the Earldom of March) receives £23, 6s. 8d. for his expenditure while residing at Ravenscraig. Whether or not the castle was completed under Mary of Gueldres does not appear, but the payments for it cease at her death."

Ravenscraig did not long remain a Royal residence, as the castle and lands were bestowed by James III., in 1470, on William St. Clair, fourth Earl of Orkney, in exchange for his castle of Kirkwall, and "his haill right to the Earldom of Orkney" (Sibbald's *History of Fife*).

MORTON CASTLE, Dumfriesshire.

This is one of the most interesting buildings in Nithsdale. It is situated about three and a half miles northwards from Thornhill, amidst the bare and solitary uplands near the mountains between Dumfriesshire and Lanarkshire, and at a considerable distance from the main road, which no doubt at all times led up the valley of the Nith into Ayrshire. Possibly the site has been selected by some early chieftain for his stronghold, partly on account of its secluded situation, which would afford a well-concealed retreat in case of pursuit.

The castle stands on the crest of a tongue of steep rocky ground washed on three sides by a loch artificially formed at some remote period by a dam thrown across the glen a few hundred yards lower down.

The fourth or south side forms the approach, and was no doubt cut across by a deep ditch so as to separate the castle from the mainland.

The aspect of the grey but solid old ashlar walls, and the ruined

towers still rearing their front in the midst of the wild and desolate moor, and above the chill waters of the tortuous lake, is most unlooked-for and impressive.

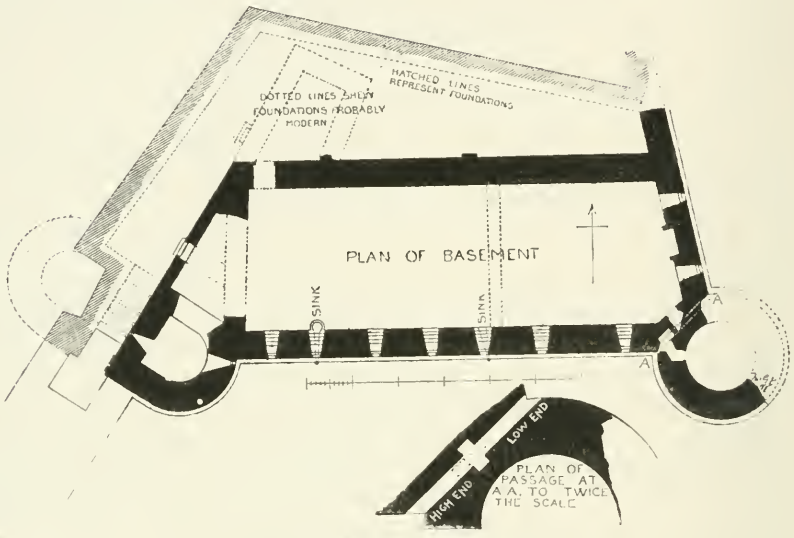


FIG. 465.—Morton Castle. Plan.

The castle (Fig. 465) consists of an oblong block presenting a front wall 92 feet long facing the south, and was fortified with a round tower at the south-east angle, about one half of which still remains, while at the south-west angle was the gateway, placed between two large towers circular to the outside and square within. The eastern of these two towers still stands, but the western tower, together with the arched gateway and entrance passage, have been demolished. The foundations of the western tower, however, still partly remain, so that when laid down on plan it is easy to see what the completed arrangement originally was. One jamb of the entrance gateway and a few of the arch stones are still standing, and show from the grooves and rebates cut in them that the gateway was defended—first, with a drawbridge; second, with a portcullis; and third, with folding gates. The sill of the gate and the floor of the entrance passage were on a level raised about one story above the ground without. The approach was probably effected by means of a wooden gangway crossing the ditch and rising gradually to the gateway, from which, however, it would be cut off by the space occupied by the drawbridge when lowered. Underneath the sill of the entrance gateway there is a carefully constructed pit lined with ashlar. It is possible that the drawbridge was balanced on pivots, so that when raised part of it would be below the level of the passage and part above, and when lowered part would be outside the gate and would form the

drawbridge, while part would be inside and would form a portion of the passage. The drawbridge of the keep of the great castle of Coucy was constructed in this way. Such an arrangement as this would account for the carefully built pit, part of which still remains. It is not easy to imagine for what other purpose this pit could have been intended. The existing walls to the south of the gateway, which are about 2 to 3 feet high, have probably been constructed at a more recent date to fill the ditch and form a more convenient access, but the drawbridge with the pit below have apparently still been preserved and used. On the right hand on entering the gateway there can yet be traced the springing stones of the ribs of the depressed vaulting which covered the entrance passage, as far at least as the towers extend northwards. These ribs are shown by dotted lines on the plan.

The passage beyond this may have been open, forming a small courtyard, and probably from this courtyard a staircase ascended to the first floor of the building, and also to the battlements which crowned the wall of enceinte, which no doubt surrounded the castle on the north and north-west in the position shown on the plan, where the line of the foundations can still be distinctly traced. The eastern wall seems, for additional security, to have been carried down the steep bank to the loch. A similar arrangement occurs at Yester Castle. The north wall encloses a courtyard, and appears to have contained the stable offices (Fig. 466).

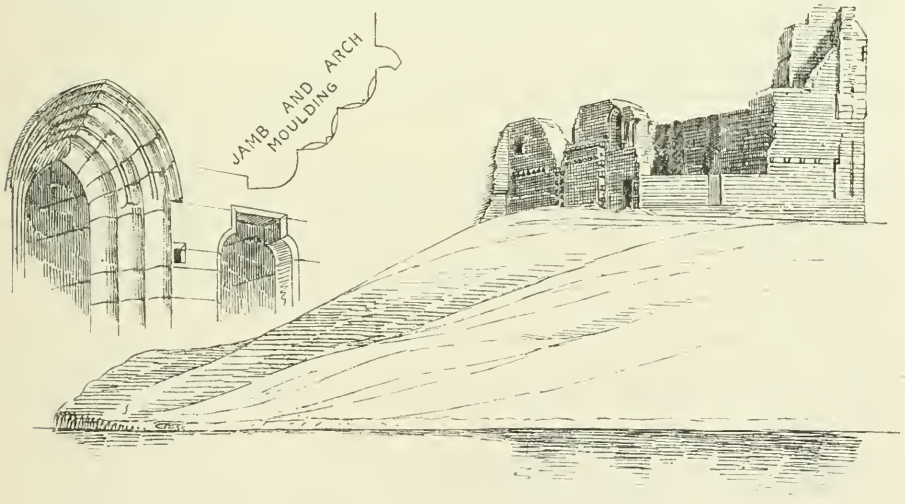


Fig. 466.—Morton Castle. View from the North-West.

The corbels for the wall-plate of the lean-to roof, with weather-table above, still remain, and there were no windows in the north wall except near the east and west ends, and one at a high level in the centre, so as

to admit of the roof of the outhouses resting against that wall. The castle itself has been two stories high, the ground floor evidently having contained the kitchen and other offices, and the upper floor the great hall. The length of the building inside the walls is 105 feet, by 31 feet wide. The ground floor was lighted with nine square-shaped windows about 15 inches wide and 12 inches high, set high in the walls, and provided with stone steps in the ingoing leading up to them.

These windows and several other features, such as the main entrance, with its drawbridge and portcullis, and the side doorway to the first floor (to be afterwards referred to), are very similar to the corresponding features of Tullyallan Castle.

The ground floor contains stone sinks with drains under two of the windows, and a large fireplace at the east end. There has also been a garde-robe entering from the east room (probably the kitchen) in the wall of the eastern tower, and another entering from the room in the tower. These have shoots to an outlet or passage with sloping sill, which cuts across the gorge of the tower (see enlarged Plan, Fig. 465).

This passage has an upright groove in the masonry on each side, in which a sliding board or stone was evidently made to work, and which could be lifted, so as to allow the soil to escape and the passage to be cleared out.

The south-east tower is greatly damaged, but it has evidently formed a private room entering off the hall on the upper floor, while the room on the ground floor seems also to have entered from the hall by a stair *down*, as there is no access to it from the basement.

The hall has been a splendid apartment 93 feet by 31 feet, and probably had an open timber roof.

It is lighted to the south (Fig. 467) by three double windows with square heads and centre mullion and transom. There is now a fourth similar window on this side at a lower level, but this has evidently been an insertion. The position now occupied by this window has originally been occupied with an entrance door, similar to that on the first floor at Tullyallan, and also to that at Rait Castle.

The present window sill is at the level of the floor (where the door sill would naturally be), and there is a bold saving arch in the wall over the lintel at a suitable height for a door. This door would give easy and safe ingress and egress, without the necessity of putting in operation the heavy machinery of the great gateway.

The openings in the north wall still remain to be noticed. That near the east end of the wall has the outer lintel supported with a continuous corbel, such as is often seen in small passages. It may have been a door communicating with an upper story over the outbuildings at this point.

The western window (Fig. 466) is a very handsome one, and is the

only part of the building having mouldings from which the date may be ascertained. The arch is pointed, and springs from two rounded projections forming the jambs, against which the arch moulds die away.

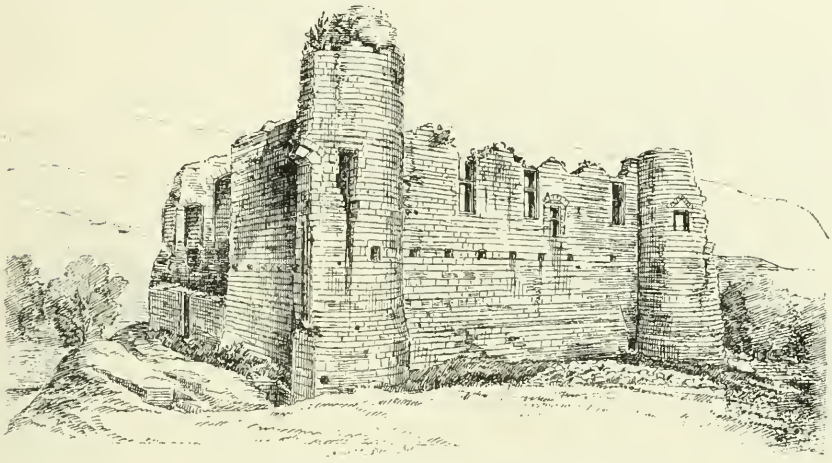


Fig. 467.—Morton Castle. View from the South-West.

The position and form of this window recall the similar window at the daïs end of the hall of Bothwell Castle, and the mouldings belong to the fifteenth century.

There are two windows adjoining, which probably lighted a wall chamber. Of one of these only one side remains. The window in the upper floor, in the centre of the north wall, is nearly gone; only the side and part of the rybats remain, there being a great gap in the centre of the upper part of the wall.

At the west end of the hall there was most likely a fine private room over the entrance passage, as the arch stones indicate a large window in this position. There would also be several chambers in the various floors of the two gate-towers. These were no doubt the bedrooms of the proprietor and his family and guests.

This castle possesses several points of interest which connect it with some other remarkable castles, and by comparison enable the architectural history of all these buildings, hitherto somewhat obscure, to be better understood.

Tullyallan, for example, would stand quite alone without Morton to illustrate it, and Rait would be in a similar position. But the comparison of the various features of these castles with one another, and with the more ordinary forms of the castles of the period, enables us to assign to them a date, and to connect them with the general architecture of the country.

The elongated form of the buildings of these three castles, with the towers at the angles, the small oblong windows of the ground floor in

each of them, the evident use of this floor for stores and kitchen offices, the mullioned windows of the hall (although all are arched at Rait, and only one at Morton), the door to the hall on the first floor level in all three (like the usual door in the ordinary keeps), are all features which either serve to connect these edifices with each other, or to show that, although of a larger and more ornate character than the castles usually erected at the time, they still resemble them in general features.

Judging from all the details available, there seems to be almost no doubt that these three buildings all belong to the first half of the fifteenth century. At that period plans with quadrangles were being adopted, and these plans are modifications which combine some of the features newly introduced with those of the ordinary keep plan, so general during the preceding century. They are, in short, intermediate between the two designs of plan (the square keep and the courtyard plan), and in this respect remind us of the plans of Hermitage and Crookston. They have the enlarged keep of the "courtyard plan" without the extended buildings surrounding the courtyard.

There is almost no record of the history of Morton Castle. The site is said to have been occupied by a castle from an early period.

Dunegal, the Lord of Nithsdale in the twelfth century, is supposed to have had a stronghold here. The barony belonged to Thomas Randolph, Bruce's nephew and friend, in the fourteenth century. It afterwards passed by marriage to the Earl of March, and finally came into the possession of the Douglases. In 1396 the barony was in the hands of James Douglas, Earl of Morton, who probably took his title from this castle. In 1459 it was disjoined from the main branch of the Douglases of Dalkeith, Earls of Morton, and passed to a cadet branch of the family, and was subsequently acquired by the Dukes of Queensberry, and is still the property of their successors, the Dukes of Buccleuch.

The cottages in front of the castle, shown in Grose's view, are now removed. The castle is said to have been occupied till the beginning of the eighteenth century (see Dr. Ramage's *Drumlanrig and the Douglases*).

TULLYALLAN CASTLE, Perthshire.

This mansion is situated in a detached portion of Perthshire, near Kincardine on the Forth. It belonged formerly to the family of the Blackadders, but almost nothing seems to be known of its history.

It has been designed as a pleasant residence rather than a place of strength, and thus shows more elegance and taste in its architecture than is usual in the great but gloomy castles of the time. This is well illustrated by the fine vaulting of the ground floor (Fig. 468), which

surpasses anything of the same kind to be met with in any similar building in Scotland. At the same time, defence is not lost sight of. The principal entrance (Fig. 469) has been approached by a drawbridge, the

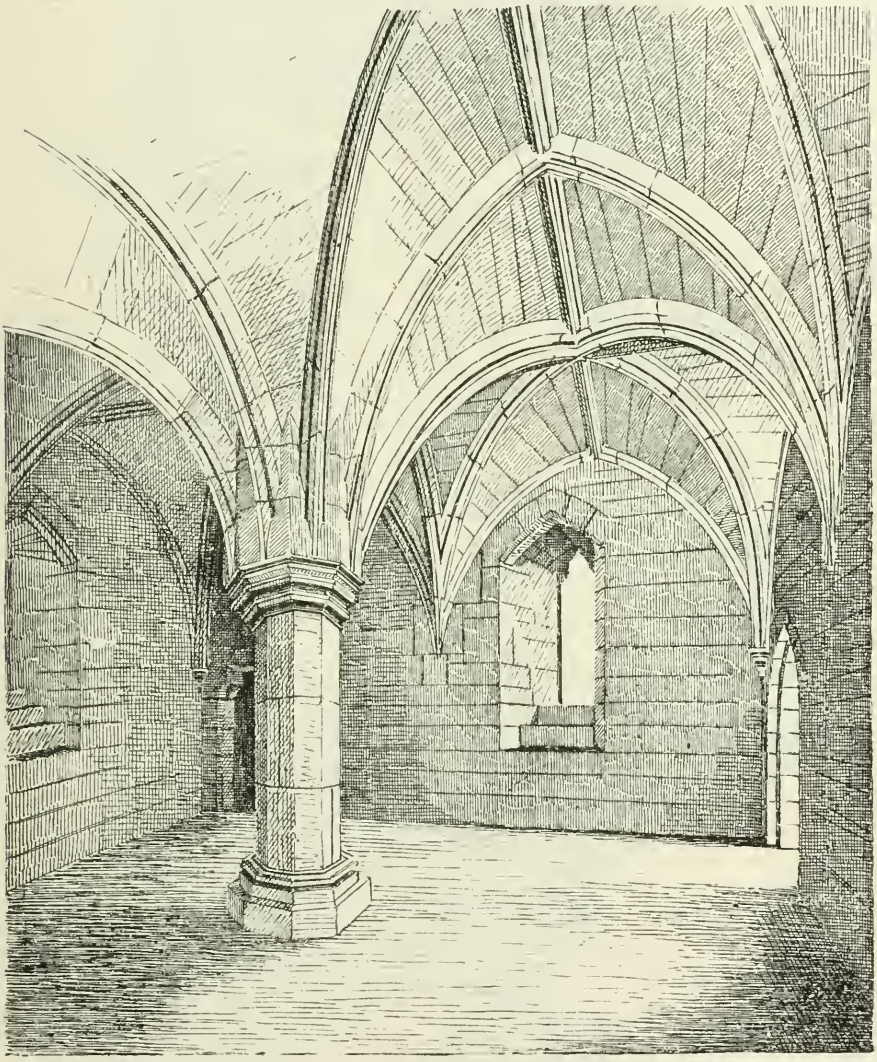


Fig. 468.—Tullyallan Castle. Interior of Ground Floor, looking East.

recess from which, together with the aperture for the chain and the chamber for the windlass, are all well preserved (Section, Fig. 470). This entrance was also protected by a portcullis, and there are apertures or

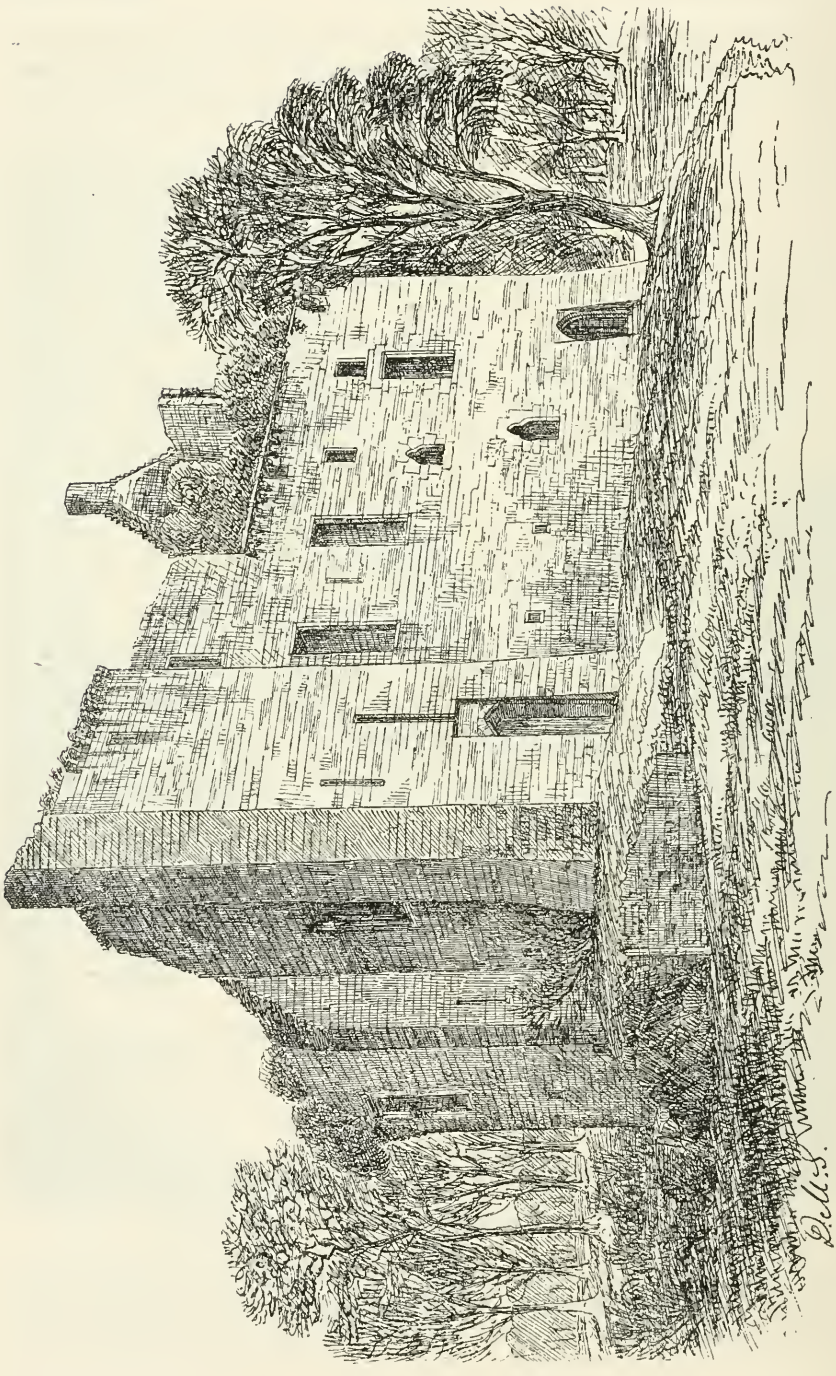


Fig. 469.—Tullyallan Castle. View from the South-West.

machicolations over both this door and the postern at the east end, by which missiles might be thrown on assailants who might have penetrated through the outer doors.

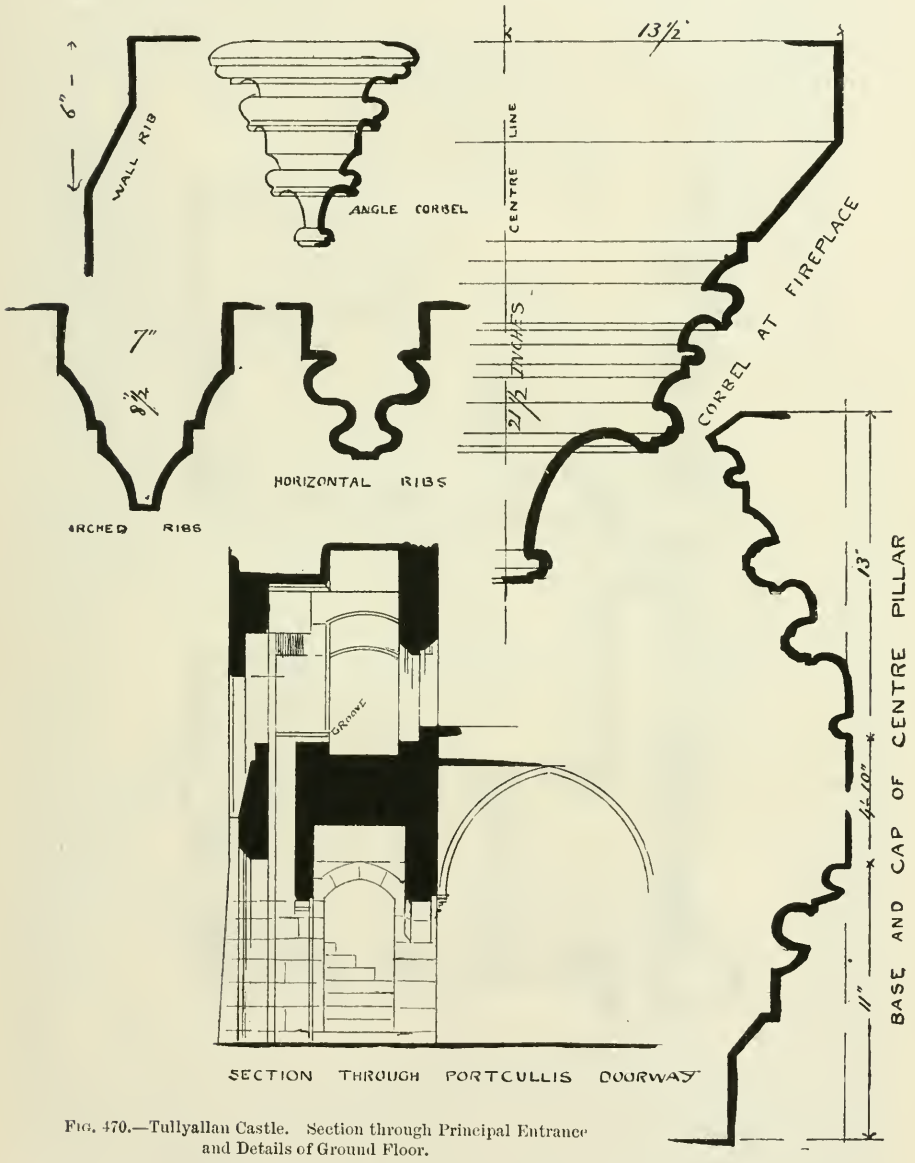


Fig. 470.—Tullyallan Castle. Section through Principal Entrance and Details of Ground Floor.

The plan (Fig. 471) shows that the ground floor was divided into two apartments, both beautifully vaulted with groined and ribbed arches rest-

ing on a row of central pillars. The smaller of these apartments (25 feet 6 inches by 22 feet) had a great fireplace (Fig. 472), with moulded jambs and large projecting hood. Details of these mouldings are engraved (Fig. 470), showing in several instances a character so decided Early English as at first sight to lead one to imagine that the building belonged to the thirteenth century. But when the other mouldings of the vault-

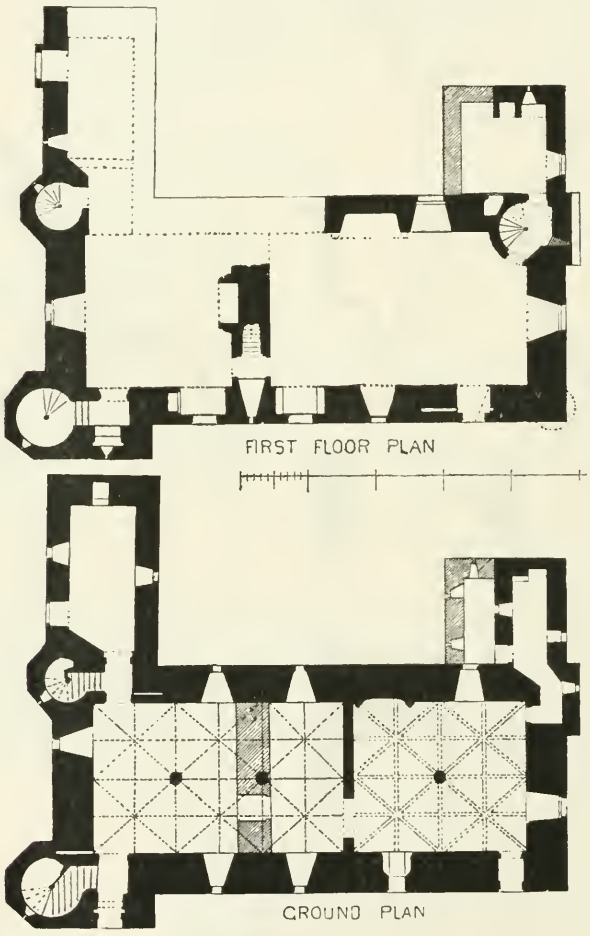


Fig. 471.—Tullyallan Castle. Plans.

ing are examined, and when the other features of the castle are compared with similar buildings in Scotland, it becomes clear that Tullyallan must be classed with Morton and Rait Castles as belonging to the fifteenth century. The moulded sconces for lights at each side of the chimney are rare features in Scotland, though not uncommon in France

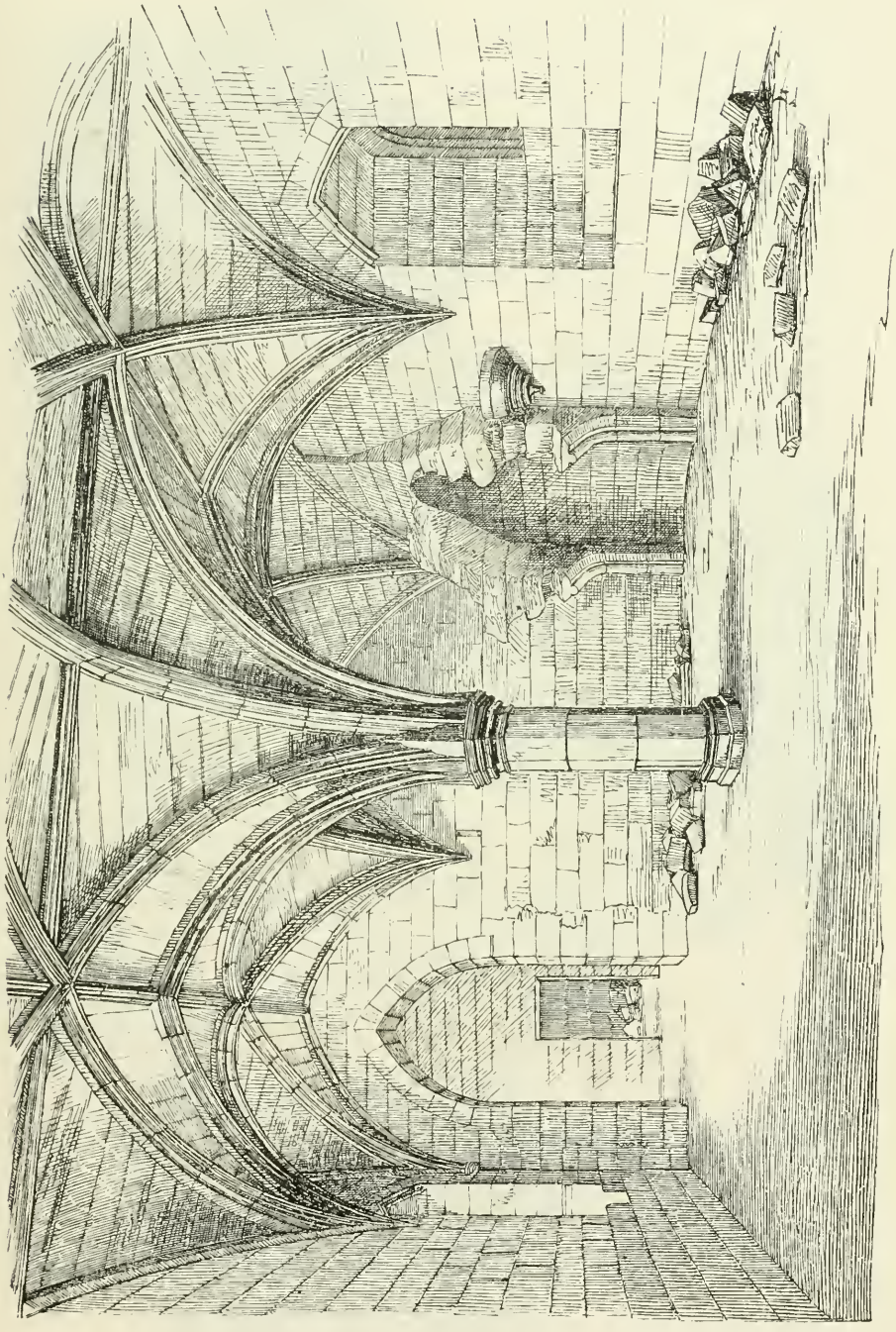


Fig. 472.—Tullyallan Castle. Interior of Ground Floor, looking West.

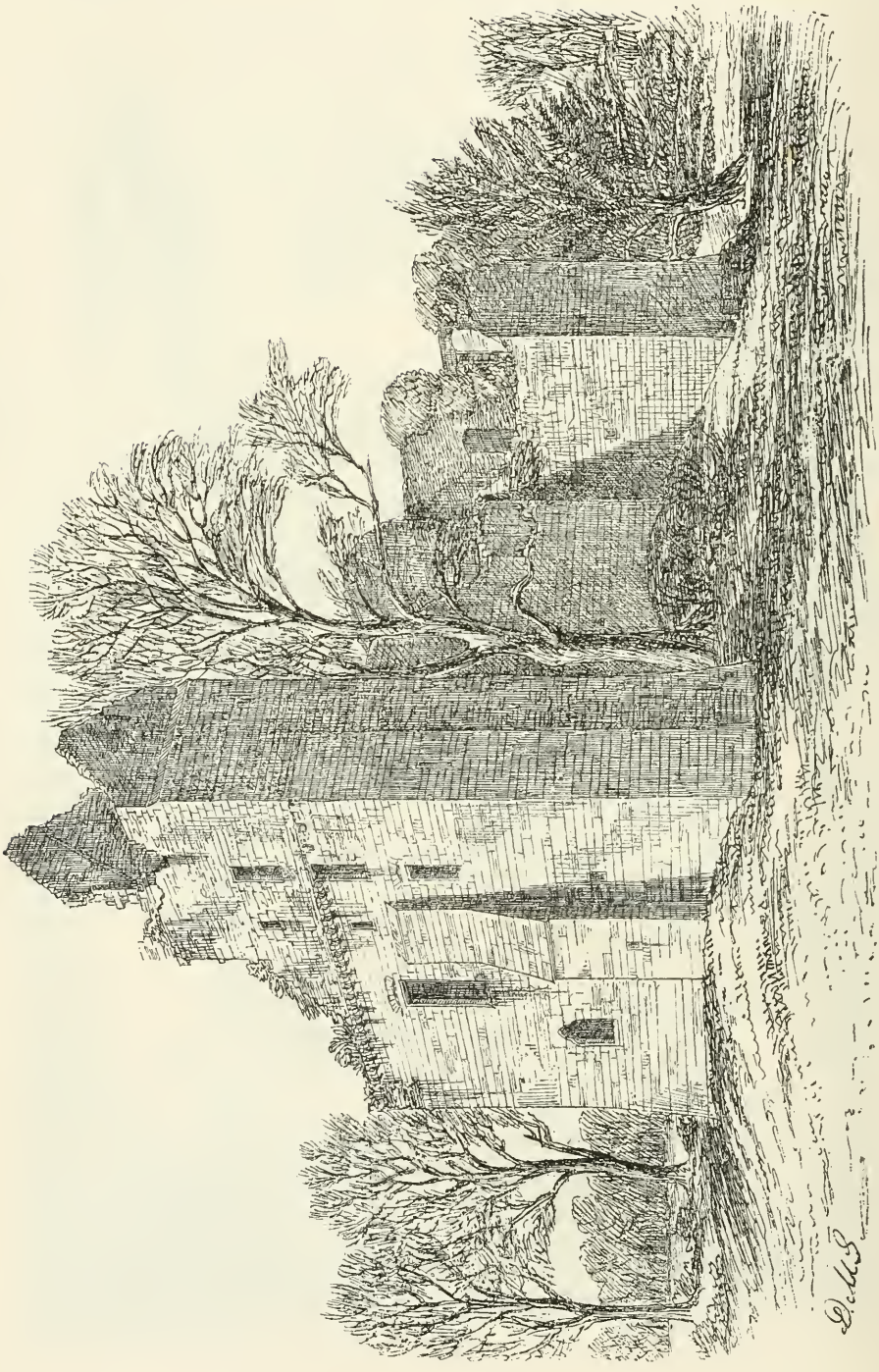


Fig. 473.—Tullyallan Castle. View from the North-East.

and England. The windows of this room are of unusual size for a ground floor, and have trefoil arched heads, and stone seats in the recesses. The small wing at the north-east corner was probably intended both as a garde-robe and as a flanking tower for defence. The other apartment on the ground floor, which is 37 feet by 22 feet, seems to have been used for stores, as it has no fireplace, and only small square openings for windows.[1] The projecting north-west wing, with separate staircase attached, was probably the cellar, but might also be used for purposes of defence.

The upper floor (Fig. 471) contained the great hall, 38 feet by 22 feet 6 inches, and private hall, 21 feet 6 inches by 22 feet 6 inches, with a bedroom off it over the cellar. A staircase contained in the projecting octagonal tower between the two latter rooms leads down to the cellars and upwards to the floor above. A peculiar feature connected with the common hall is an outside entrance door on the first floor level (Fig. 469). This was probably reached by an outside stair of some temporary kind, which might be removed in case of attack. This arrangement would make it unnecessary to lower the drawbridge and open the principal entrance doorway except on special occasions. It also explains why the main staircase led to the private hall, instead of, as usual, to the common hall, as without the above separate entrance to the latter all the traffic to the hall would have passed through the private room, which would have been very inconvenient.

The principal entrance, with its drawbridge and portcullis, has considerable resemblance to that of Morton Castle, and the side entrance to the hall on the first floor is like that at Rait Castle, and also like one which originally existed at Morton, but was subsequently built up. The finely dressed ashlar-work of Tullyallan is another point of resemblance to Morton, but the fine groined vaulting of Tullyallan is entirely its own.

The mansion seems to have been enlarged, probably in the sixteenth century, when the north-east wing was doubled in size, and carried up several stories so as to provide bedrooms (Fig. 473).

The house was surrounded with a rectangular enclosure of considerable extent, with a ditch and mound (the latter no doubt palisaded), traces of which are still distinctly visible.

[1] The vaulting in this apartment is in a state of great ruin, and has nearly all fallen in, while that in the other room requires the help of wooden props to keep it up. Unless effectual means are soon taken to keep out the damp, this vaulting, which is one of the finest things of its kind in Scotland, will soon be entirely lost.

RAIT CASTLE, Nairnshire.

There is no account of the origin of this interesting and almost unique building. It stands on a hillside about three miles south from the town of Nairn, and commands the level and fertile country between it and the Moray Firth. Tradition says that it belonged first to the Raits of that Ilk, and afterwards to the Comyns.

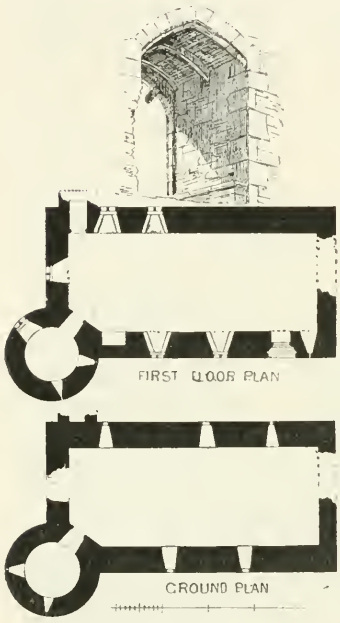


Fig. 474.—Rait Castle. Plans.

In plan (Fig. 474) this castle is a simple oblong, 64 feet by 33 feet over the walls, which are 5 feet 6 inches thick, with a round tower, 21 feet in diameter, at the south-west angle only. The only entrance to the castle seems to have been on the first floor near the east end of the south wall (Fig. 475). The doorway is still entire, and has porteullis grooves near the outside, with jambs for a wooden door within. The form of the arch is very unusual, and the workmanship is superior to that of ordinary castles. This doorway appears to have led directly into the hall, or there may have been a guard-room screened off at the east end, forming a passage to the hall. The hall is lighted with windows of a form and design very uncommon in Scotland. They are all about 3 feet wide, have pointed arches, and are furnished with mullions and stone seats. The round tower enters off the hall, and contains a private room, which also has a mullioned window. The arch of all the windows has been filled with the simplest kind of tracery, formed by the mullion branching at the impost, with a pointed arch to either side. The ingoing of the windows is roofed over with a depressed arch, having two ribs in the depth (Fig. 474). There are no mouldings in the building to give an idea of its date; only plain splays are used. The ruins of a projecting garde-robe, somewhat like that at Tullyallan, remain at the north-west angle (Fig. 476).

The ground floor is lighted with several small square windows, varying from 12 inches to 18 inches in width. That nearest the north-east angle is a loop with a pointed arch. There is no fireplace on the ground floor, but the hall has a plain one. The building was no doubt three stories in height, but the walls of the top floor have now been removed.

This building possesses several features which recall similar ones at Tullyallan and Morton Castles, which indeed are almost the only other buildings with which it has affinity.

The simple oblong shape, the door on the first floor with its portcullis, the character of the window recesses, and the small square windows of the basement, have all a certain similarity to the corresponding features of the above castles.

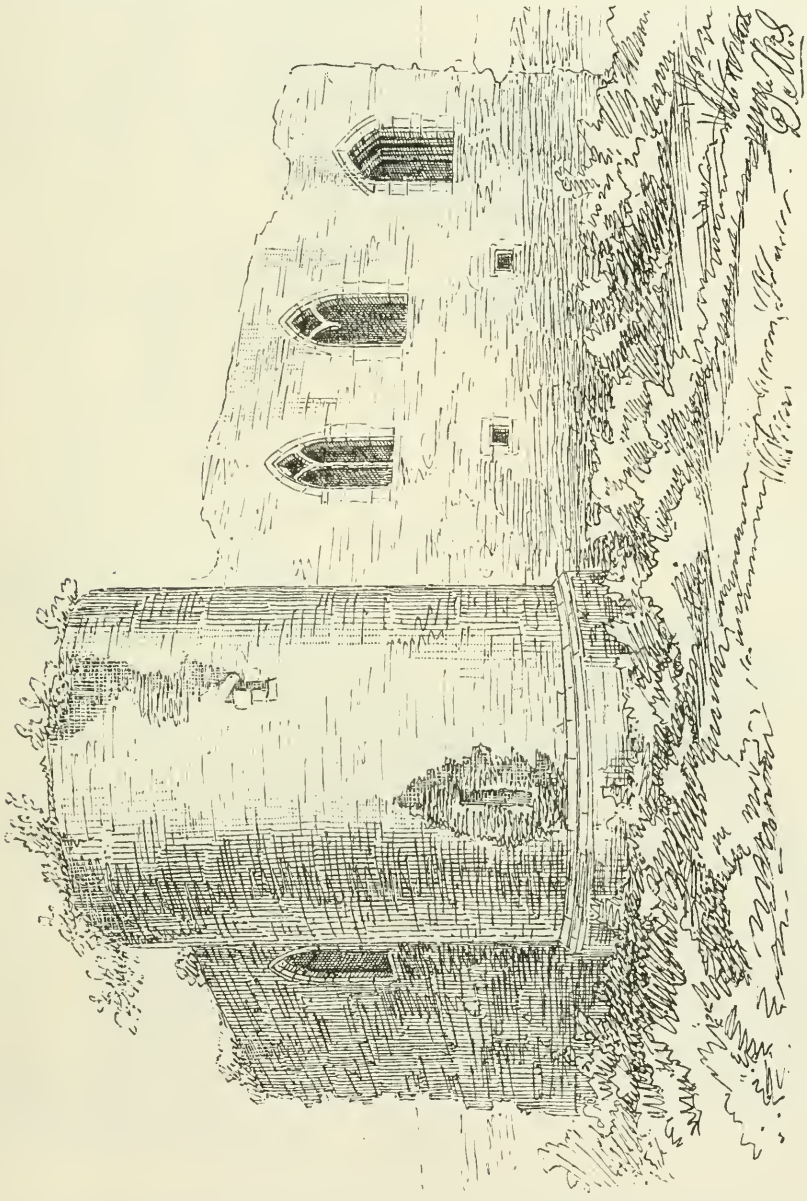


Fig. 475.—Rait Castle. View from the South-West.

Like Tullyallan, this may have been a grange or mansion rather than

a castle, although still to a certain extent provided with defensive works. The courtyard was surrounded with a wall on the east, north, and west

Fig. 476.—Rait Castle. View from the North-East.

sides, while on the south side it was bounded by a perpendicular face of rock rising as high as the enclosing walls, and against which they abutted.

Behind this the rocky hill slopes gradually upwards. The round tower was probably placed at the south-west angle of the building so as to defend the courtyard on this its weakest side. The north-east and north-west angles of the courtyard wall were strengthened with round towers, now in ruins.

The pointed, mullioned, and traceried windows are the most striking and exceptional features of the building. They probably indicate a date early in the fifteenth century. The castle is exceptional, and has more affinity with ecclesiastical than civil or military architecture.

ARBROATH ABBEY, Forfarshire.

We have here (Fig. 477) an example of a castellated building connected with an ecclesiastical foundation.

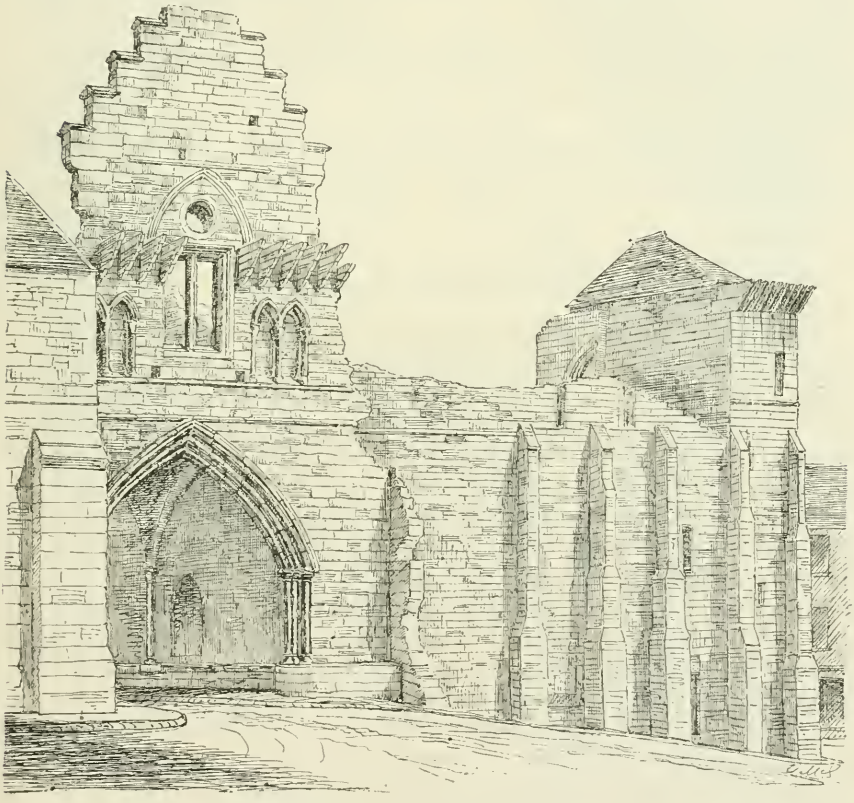


Fig. 477.—Arbroath Abbey. Entrance Gateway.

The precincts of the abbey, as was usually the case with such build-

ings, were surrounded with a strong wall of enceinte strengthened with towers. At Arbroath one of these towers, at the north-west angle of the enclosure, shown on the drawing, is still preserved. It is 24 feet square by 70 feet in height, and still retains the great corbels which carried the parapet, and between which were formed the machicolations by means of which the enemy could be assailed.

Between the tower and the abbey gateway there is a considerable portion of the original wall of enceinte strengthened with buttresses. The gateway itself is probably the finest specimen of that class of building in Scotland.

The upper portion is particularly interesting. The great corbels indicate the mode in which the defences of the parapet were continued over the archway when required. In time of peace these corbels and the window above would remain bare and open as they now are, but when it became necessary to prepare for a siege the corbels would become the foundation on which a strong wooden hoarding would be raised for the defence of the gateway.

The style of the arches, mouldings, and other details, is quite ecclesiastical, and dates about the end of the fifteenth century.

We shall close our account of the Castles and Domestic Buildings of the Third Period with a description of

DUNNOTTAR CASTLE, Kincardineshire.

This castle contains within its enceinte examples of the various changes which took place in the disposition of the buildings and defences, as well as in the domestic arrangements of these edifices from the fifteenth till the seventeenth century. It will thus form a natural conclusion to the Third Period, and an introduction to the Fourth or latest Period of our Domestic Architecture. Dunnottar Castle is situated about one mile south from Stonehaven, and stands on the platform of an isolated rock detached from the general precipitous seaboard of the district, and washed nearly all round by the German Ocean. The area of the site is about three and a half acres in extent, and is naturally of great strength, being surrounded with perpendicular rocks rising from the sea to a height of 160 feet, except at the narrow strip of land on the level of the sea-shore, by which it is joined to the mainland.

The earliest record of any buildings on this rock states that at the end of the thirteenth century it was occupied by the parish church. At that time Sir William Keith is said to have erected a tower on the rock, and to have been excommunicated by the Bishop of St. Andrews for the offence of building on sacred ground. On referring the case to

Pope Benedict XIII., a Bull was issued, dated 13th July 1394, requiring the Bishop to remove the sentence of excommunication, and allowing

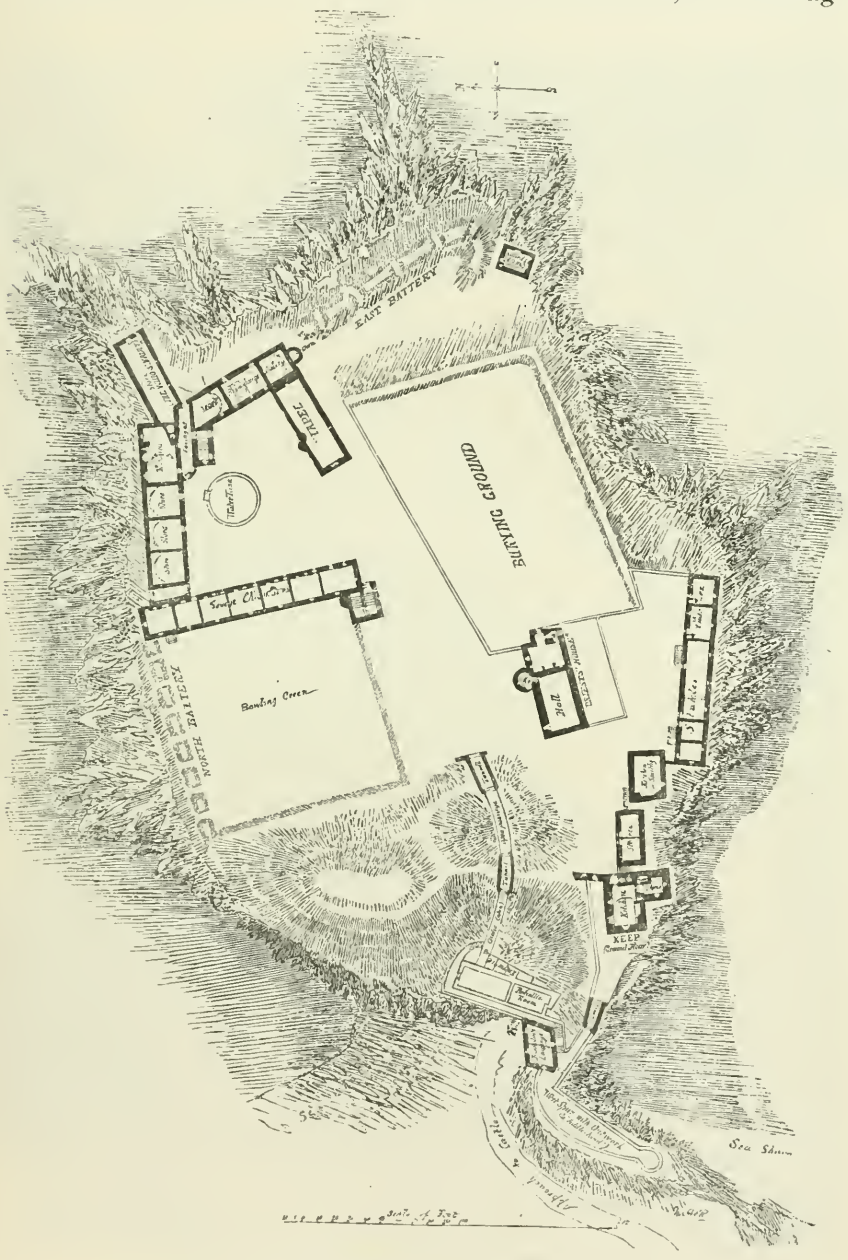


FIG. 478.—Dunnottar Castle. General Plan.

the castle to remain, on condition that Sir William should build a parish church in a more central situation.

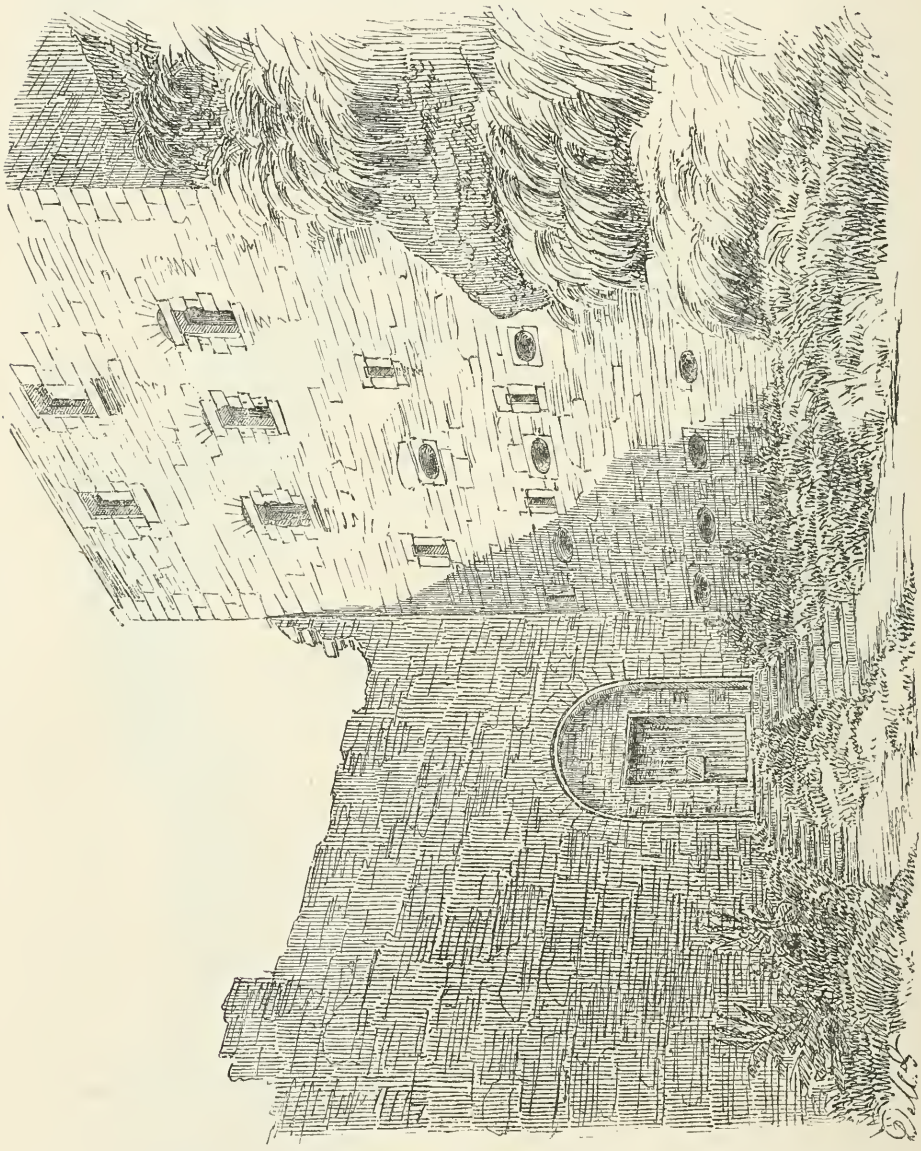


Fig. 479.—Dunnottar Castle. Entrance Gateway.

Sir William Keith obtained Dunnottar from Lord Lindsay of the Byres in exchange for Struthers, in Fifeshire, about 1382-92, and the oldest portion of the present castle is subsequent to that date.

The castle is approached by a very steep path which descends the cliffs on the mainland, and is commanded from an outwork on a jutting

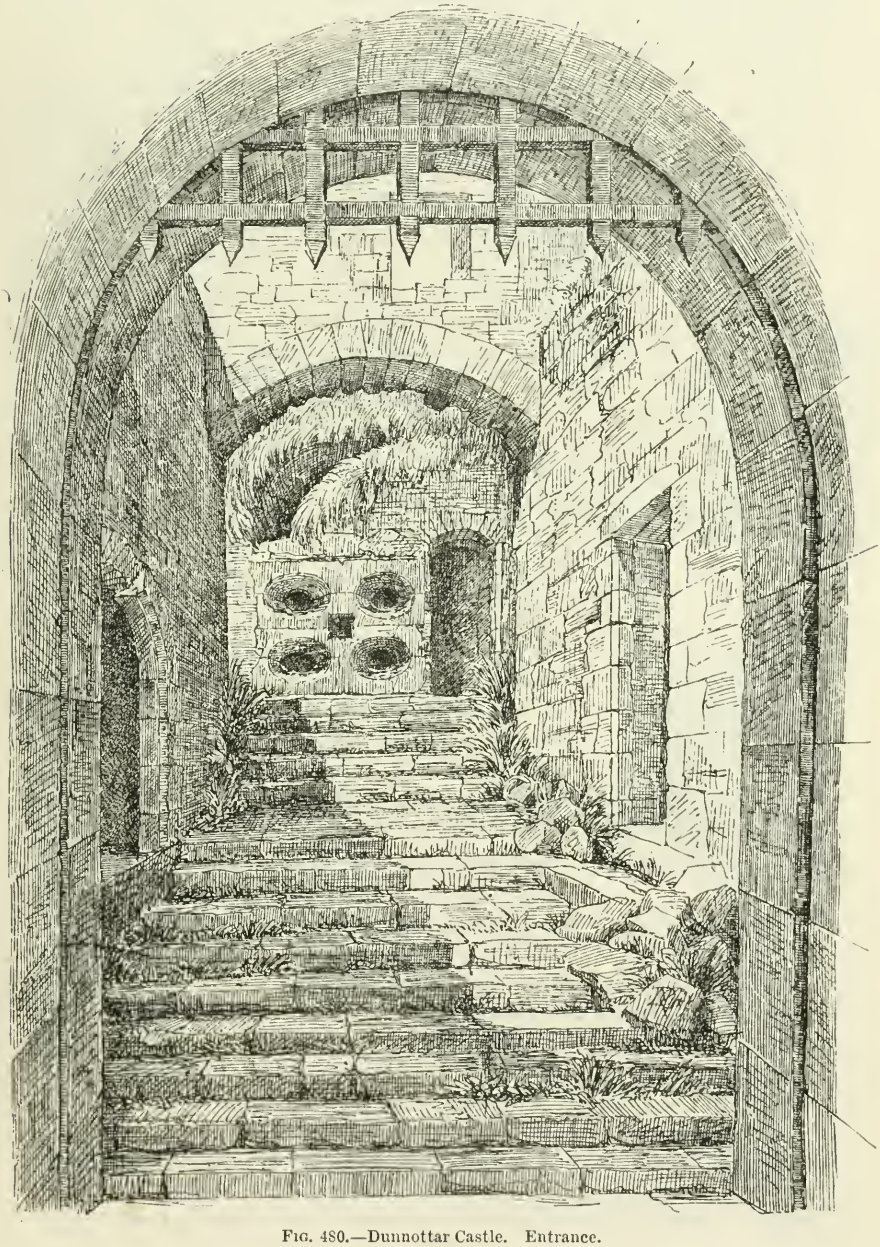


Fig. 480.—Dunnottar Castle. Entrance.

promontory of the castle rock called the "Fiddle-head" (Fig. 478). The road then winds round the base of the rock till it comes to the gateway, which is approached by steps, and is defended by a building on the right called "Benholme's Lodging" (Fig. 479), furnished with three tiers of loopholes. The original gateway (now partly built up) was $5\frac{1}{2}$ feet wide, with a semicircular arch. It is the only opening in a solid wall 35 feet high, crowned with a parapet wall and battlement, which is continued seawards till it joins the perpendicular face of the rock. The above buildings and wall fill up the only cleft in the rock by which access to the interior of the castle, which stands on the summit, can be obtained.

On passing the archway the visitor is confronted by the porteullis (Fig. 480), beyond which, at the top of a flight of steps, four oval embrasures for guns, arranged in the form of an oblong with a square embrasure in the centre, frown down upon him.

On the left hand (Fig. 481) is the guard-room, and on the right a door leading to the ground floor of "Benholme's Lodging," which at this point is excavated out of the rock, and contains a small prison.

The guard-room in front, from which the five embrasures open, is also to a great extent dug out of the rock.

At the top of the above-mentioned flight of steps the roadway turns at right angles to the left, and ascends rapidly, with occasional steps in its course to ease the ascent. After 29 feet it again turns at right angles to the right, and, still ascending, at 29 feet further (Fig. 478) is interrupted by a door, 5 feet wide, strongly secured, leading into an arched passage or tunnel 26 feet in length, defended with a door at the other end. Beyond this the open roadway is continued till it is stopped by another arched passage 26 feet 7 inches long, defended with doors or gratings at either end. This second tunnel passed, the road at length emerges by a round arched doorway (to the right, Fig. 482) on to the open platform on the top of the rock.

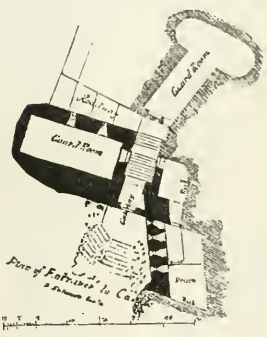


Fig. 481.—Dunnottar Castle. Plan of Entrance.

The open portions of the above approach are completely commanded from the buildings above, and from the parapets which no doubt formerly crowned the entrances to the tunnels, as well as from the steep slopes of the ground on either side. The passage itself is curved, so as to give shelter to the defenders, while the sloping ascent would give them a great advantage over the assailants.

The whole thus formed as impregnable an approach as can well be conceived. Some of the buildings at the gateway are evidently of a late date, but they must have been preceded by others of a similar nature. This elaborate approach is probably not so old as the keep, the

original access to which may have been by a flight of steps from the gateway. The probable position of these steps may be indicated by the

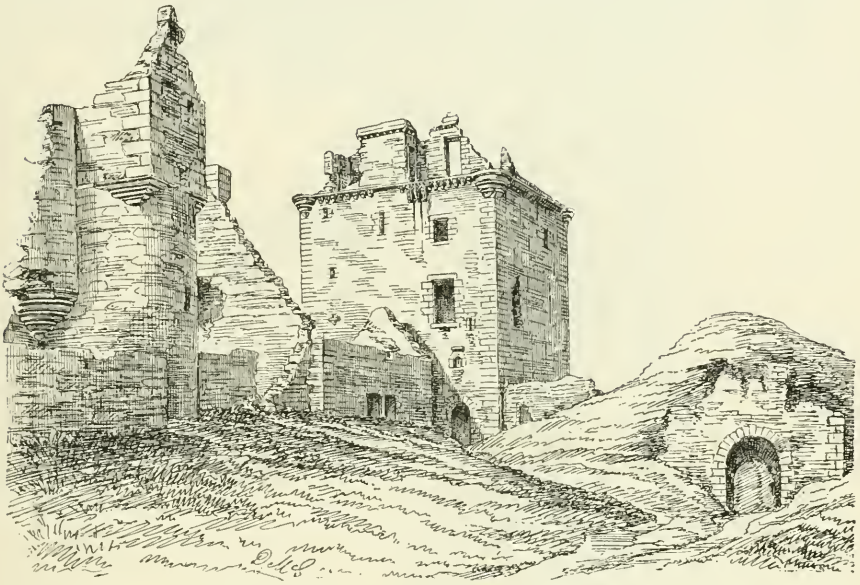


Fig. 482.—Dunnottar Castle. View of Keep from the South-East, and Upper Entrance to Castle.

existing stair at the south-east corner of Benholme's Buildings. The access to the keep from this side passes through a tunnel cut in the rock, which is well protected with doors, and otherwise similar to the tunnels of the main entrance.

Having now reached the platform on which the buildings of the fortress are situated, let us examine these in the probable order of their erection.

The oldest building is undoubtedly the keep at the south-west corner of the platform. It was probably erected after the Keith Marischals obtained the property, and is of the early part of the fifteenth century. The plan presents the usual arrangements of the period, being of the L shape, and four stories in height.

Fig. 483.—Dunnottar Castle. Plan of First Floor of Keep.

It had originally, on the ground floor, the ordinary vaulted storerooms, with a small prison under the stair, the common hall on the first floor (Fig. 483), and the upper hall and the lord's private apartments in the top stories. The ambry (Fig. 484) in the upper hall is in the usual style of the above period. The entrance door (Fig. 482) is on the

ground level. A straight stair leads, in the thickness of the wall, to the first floor, and a newel stair in continuation gives access to the upper floors and the roof. The stone gutter or parapet walk still exists, as well as the projecting corbels which carried the parapet, with open machicolations between.

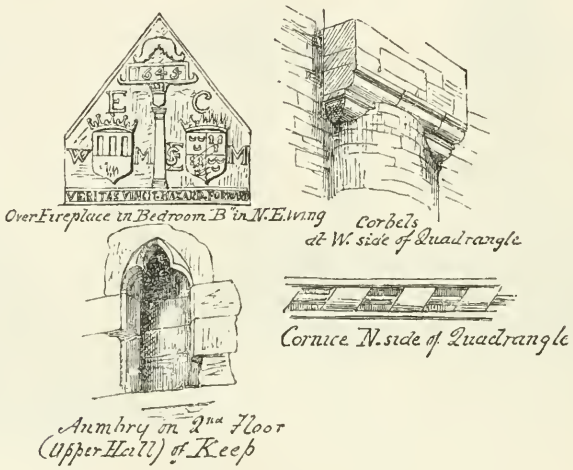

Over Fireplace in Bedroom B in N.E. wing
Corbels at W. side of Quadrangle
Cornice N. side of Quadrangle
Aumbry on 2nd Floor (Upper Hall) of Keep

Fig. 484.—Dunnottar Castle. Details.

The kitchen was originally in the wing on the first floor. The large fireplace still exists, with an oven on one side, and a small stone sink and drain on the other. But as domestic requirements increased, this room was converted into a private apartment, and the fireplace reduced in size, while the kitchen was transferred to the large vaulted storeroom on the ground flat. This is apparent from the great fireplace there having evidently been an insertion. But gradually still further accommodation was found necessary, and the buildings to the east of the keep were erected. These may probably have been storerooms, in lieu of those displaced by the new kitchen. There are lofts above for the servants, the stair and door to which still remain.

At a later date the much more extensive range, containing stables, with accommodation for ten or twelve horses, was built further to the east. There are drains through the walls, on the floor level, in these buildings, showing that they were used as stables. The two rooms at the east end of this range are provided with fireplaces and small closets. In these the head retainers probably lived, while the existing outside stairs to the lofts show that they were occupied, doubtless by the servants. A detached building at the west end of this range, now much ruined, was apparently the kitchen connected with the stables. The large fire-

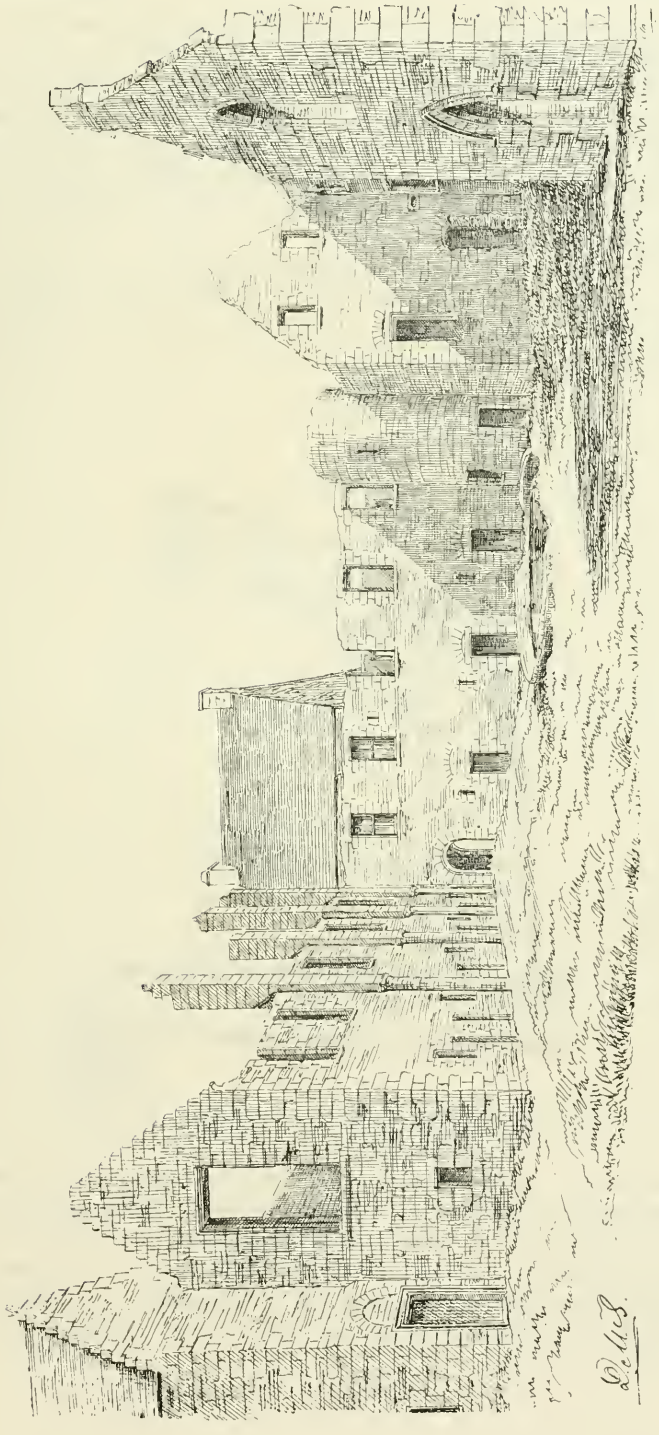


Fig. 485.—Dunnottar Castle. View of Quadrangle.

place can still be traced. It is also said to have been used as a smithy, and that cannon balls were cast in it.

The building near the upper end of the access to the castle (to the left, Fig. 482) is called the Priest's House. It has a circular turret containing the staircase, a hall and private apartment on the ground floor, and there must have been several apartments on the upper floor. The style of the corbelling, etc., indicates that it belongs to the latter half of the sixteenth century.

Adjoining it on the east is a large open space called the Burying-ground. It is possible that the original parish church may have been situated here; the mounds over the graves are said to have been visible some years ago.

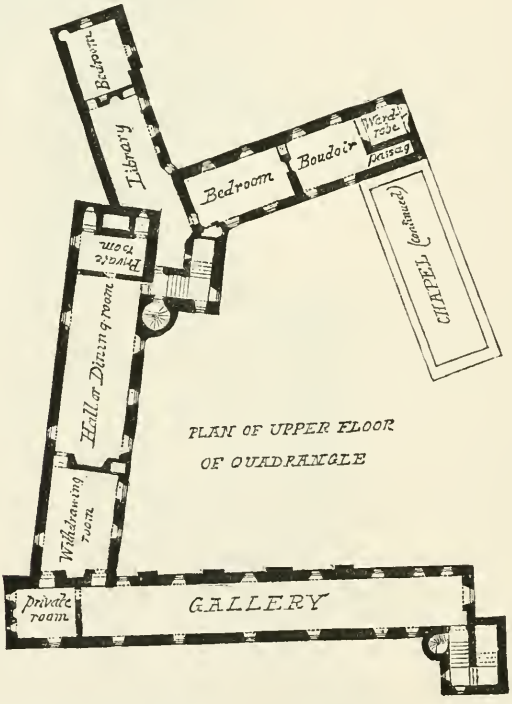


Fig. 486.—Dunnottar Castle. Plan of Upper Floor of Quadrangle.

Besides the extended accommodation above described, it was found, as time progressed and more luxurious modes of living were introduced, that the keep was too small, and enlarged accommodation for visitors during receptions and other entertainments had to be provided. This led to the erection of the range of buildings (to the left, Fig. 485) forming the west side of the great quadrangle at the north-east corner

of the platform. These buildings do not appear to have been begun before the death of William, the fourth Earl, in 1581, as he lived a retired life at Dunnottar, and was known as "William of the Tower," from his living in the keep. This range contained on the ground floor seven separate living apartments, each provided with a fireplace, and with a separate entrance from the outside, while on the floor above (Fig. 486) there was a grand gallery or reception-room (now called the Ball-room), 115 feet long by 15 feet wide, with a private room at the north end. The entrance to the gallery is by a fine square staircase in the tower at the south-west corner, with a small turret stair ascending to rooms in the upper floors of the tower above the staircase. From the style of the corbelling, etc. (Fig. 484), it may be inferred that this building belongs to the latter half of the sixteenth century.

The chapel appears also to be of about this date, but it has no architectural features of importance. Its size is however remarkable, being 57 feet long by 15 feet wide internally. It was also of considerable height, and had probably an open roof. The walls were at one time ornamented with monuments to the Keith Marischals, but these no longer exist. With the exception of the Royal palaces and castles, private chapels such as this one are rare in the mansions of this period. Small oratories or chapels, like those of Doune and Affleck Castles, represent the provision, if any, usually made for Divine Service.

In course of time, the keep, with the various extensions above mentioned, became insufficient, and the increased importance of the Earls Marischal required a mansion more suited to their state and the fashion of the times. This led to the erection of the buildings forming the north and east sides of the quadrangle.

The irregular form of this quadrangle seems to have been caused by the position of the western range and the chapel which had been previously erected. That these were previously erected is evident from the windows of two and the door of one of the rooms at the north end of the west range being built up, thus necessitating the opening of a door to the northmost of these apartments on the other side. A window in the east gable of the chapel has also been closed by the new buildings erected against it.

The new buildings in the quadrangle render it a complete mansion of the seventeenth century. The north and east sides were probably erected about the beginning of that century.

The north range contains vaulted storerooms on the ground floor, and a large kitchen, with great fireplace, two ovens, stone sink and drain, and a service window close to the main staircase. The east range contains a brewhouse, with the site of the vat and fireplace still in existence, and a bakehouse, with its oven built out beyond the wall.

The entrance to this floor is by a wide passage with a door in the

north-east angle turret, and also a back-door towards the sea. The passage contains a long stone shelf for placing the dishes on as brought out from the kitchen.

The upper floor is approached by a grand square staircase in the tower in the north-east angle of the courtyard, the steps being 6 feet 6 inches wide. This leads to the hall or dining-room, 54½ feet long by 20 feet wide, beyond which is the withdrawing-room, 29 feet long by 20 feet wide.

From the latter there was an access to the long gallery at the west end, and also to the private room there, thus forming a complete suite of public apartments, such as was usual in France and England in the seventeenth century.

At the east end of the dining-room there is the usual private room. Passing to the east range, we find an anteroom at the top of the stair, with a small window overlooking the entrance door and staircase. Entering from this is a large bedroom, and beyond it a sitting-room or boudoir, with a private passage to the outside, and a small apartment for a servant or a wardrobe. A narrow newel stair goes up from the landing of the main stair, and led to rooms in the tower over the staircase, and perhaps to attic rooms in the roof.

The stone cornice of the east range next the courtyard has been ornamented, as shown in the drawing (Fig. 484).

The large tank in the courtyard may probably have been partly supplied by a spring, and partly by rain-water collected from the roofs.

The principal supply of water to the castle was from the "Barrel Well" on the mainland, from which wooden pipes are said to have been led to the castle, but there is no indication of their having been brought to this tank. The tank is funnel-shaped in section, the sides which are built with stone sloping till they come to a point at the depth of 25 feet. There are the remains of a stair for access to the water opposite the kitchen door, and a pipe from the tank supplied water to the brewhouse.

The quadrangle was almost certainly erected by Earl George Keith (born 1553). He was a great traveller and student, and a celebrated man in his day. He founded the Marischal College in Aberdeen in 1593, and was Lord High Commissioner to the Scotch Parliament in 1609. He died at Dunnottar in 1623.

The last addition to the buildings of the castle is the projecting wing at the north-east angle of the quadrangle. This contains on the ground floor a vaulted apartment 58 feet long by 15 feet wide. It seems to have been originally intended for stores, but has since obtained an unenviable notoriety as the prison of the Covenanters. In this cellar one hundred and ten prisoners (men, women, and children) were confined during *a whole summer*, which of itself would be cruelty enough, without taking into account the tortures they are said to have been subjected to.

On the east end, owing to the slope of the ground, there is a small basement floor, probably used as a wine-cellar, as there is a hatch in the floor above for drawing up supplies. In this cellar, it is said, there were confined no fewer than forty-two of the Covenanters.

The upper floor of this wing contains two apartments, which seem to have been used as a private room and a bedroom. Over the fireplace of the inner room is the sculptured stone (shown in Fig. 484), containing the arms and monograms of Earl William Keith and his first wife, Elizabeth Seton, daughter of the Earl of Winton, who died in 1650. This Earl espoused the Royal cause, and was a strong supporter of Charles II., whom he entertained at Dunnottar. At the Restoration he was made Lord Privy Seal. The above stone is dated 1645, about which time this latest addition to the castle was probably made, in order to provide a suitable suite of apartments for distinguished guests.

There is a small detached building at the south-east angle of the platform. The rock at this point is not quite so inaccessible as at all others, and this building seems to have been a guard-room, deemed requisite at this comparatively weak point. The ground floor contained the latrines for the garrison.

It is uncertain at what time artillery was introduced into Dunnottar, but there are extensive earthen embankments, with embrasures for guns, on both the east and north sides of the platform. The open space next the latter has been levelled, and may have been used as a bowling-green.

The only siege of any consequence to which Dunnottar has been subjected occurred in 1652, when it was blockaded by General Lambert, and forced to surrender. The garrison however was permitted to march out with drums beating and colours flying. The iron guns and four mortars were allowed to remain, but twenty-one brass cannons were removed by the Parliamentary forces. The besiegers had anticipated the capture of the Regalia of Scotland, which had been committed to this fortress for safe keeping; but they were disappointed, as these insignia had been removed secretly by the wife of the Rev. James Grainger, minister of Kinneff, and concealed under the pavement of his parish church.

Earl Marischal having joined the Stewarts in 1715, his castle was reduced and partly destroyed by Argyll in 1716, and was finally dismantled in 1718.

The castle and estate now belong to Major Innes of Cowie.

INDEX.

INDEX.

Aberdeen, Marischal College, 572.
Aberdour Castle, 454.
Advocates' Library, ms. in, 371.
Affleck Castle, oratory at, 225, 571; description, 250; staircase, 295.
Aigues Mortes, gate and walls, 31, 32; hoards at, 39.
Alloa Tower, guard-room in roof, 152; description, 155.
Amboise Castle, 53.
Antibes, 20.
Antiquarian Society of Scotland, 508.
Arbroath Abbey, hoards, 225; description, 561.
Arles, Roman walls at, 3.
Armstrong, Mr. R. Bruce, *History of Liddesdale*, 523, 532.
Arques, Château d', 6, 7, 20; description, 23; subterranean passages, 112-121.
Auchendoir Church, 328.
Auchindoun Castle, description, 314.
Avignon, 33, 34.
Avondale Castle, description, 352.

Badenheath Castle, description, 307.
Balgonie Castle, 359; description, 377.
Balquhain Castle, description, 303.
Balvaird Castle, parapet, 224; bartizans, 225; embrasures, 254; description, 335.
Balveny Castle, description, 386.
Barbour, description of Dunstaffnage Castle, 92; reference to Linlithgow Castle, 478.
Barclay, Margaret, monument of, 343.
Bayeux Tapestry, 4.
Beaugency, Château de, 8, 9.
Beaumaris Castle, 42.
Bennet, Mr., Alloa Archæological Society, 270.
Benholme Castle, description, 284.
Benholme's Lodging, Dunnottar Castle, 566.
Berkeley Castle, 22.
Berwick Castle, 464; walls, 467.
Billings, R. W., *Baronial and Ecclesiastical Antiquities of Scotland*, v., 116, 390, 460, 497, 519.
Blackness Castle, 330.
Blind Harry, reference to Kinclaven Castle, 68, 69.
Blois, Château de, 53, 476.
Bodiam Castle, 49, 50.
Boharm Castle, 63.
Border peles, 58, 59.
Borthwick Castle, guard-room in roof, 152; wall paintings, 202; fireplace, 215; two wings, 224; parapet, 225; corbels, 232; barrel vault, 315; date of, 317; steep roof, 331; late Gothic work, 336; description, 344; no gunports, 393; oratory, 406, 425; top story, 407; enclosing wall, 483; Crookston similar to, 534.

Bothwell Castle, 63, 64, 65, 92, 108, 418; description, 93; exchanged for Hermitage, 524; tower with keel, 31; St. Bride's Chapel, 106; chapel, 109; keep, 116; general form, 124; buildings in courtyard, 146; water trough, 197; bartizans on buttresses, 354; arch in donjon, 527; window in hall, 549.
Boys, Mr. David, Master of Works, Ravenscraig, 544.
Brechin Castle, 63.
Brochs, 61, 62; wall chambers in, 236.
Burleigh Castle, description, 275.
Burnett, George, Lyon King of Arms, on Ravenscraig Castle, 544; Mons Meg, 463.

Caerlaverock Castle, 232; triangular plan, 64; description, 127; courtyard plan, 222; parapet, 542.
Caerphilly Castle, 42, 220.
Cairnbulg Castle, description, 309.
Cannes, Mont du Chevalier, description, 19, 20.
Carcassonne, Roman works, 3.
Cardarroch House, porch, 392.
Cardoness Castle, description, 243; mantelpiece, 308.
Carlyle, Thomas, 177.
Carnarvon Castle, description, 41, 42, 220.
Castle Campbell, description, 202; additions to keep, 223; corridor, 470.
—— Hedingham, description, 14, 15.
—— Huntly, description, 320.
—— Roy, site, 64; description, 65; no towers at, 71; like Balveny Castle, 386.
Caumont, De, on French Architecture, 2, 3.
Cawdor Castle, iron "yett" from Lochindorb, 71.
Chalmers, Rev. Peter, *History of Dunfermline*, 516.
Chambers, Dr. R., on Edinburgh Castle, 445, 455, 460; restoration of Edinburgh Castle, 449.
Chambord, Château de, 53.
Charney Manor House, 43.
Clackmannan Tower, compared with French towers, 34; attic on battlements, 152, 270; description, 178; corbels at, 443.
Clark, G. T., on English Castles, 2, 3, 22; on Conisborough Castle, 28.
Cochrane, Robert, architect, 113, 314.
Colchester Castle, 11, 12.
Colleges and Inns of Court, 48.
Comlongan Castle, description, 237; plan, 244; parapet, 250; covered parapet, 284.
Congleton Castle, 64.
Conisborough Castle, described, 28, 29, 30; buttresses at, 42; staircase, 78.
Conway Castle, 42, 220.
Coucy, Château de, described, 37, 38, 39, 40; Coucy and Pierrefonds compared, 46; Inverlochy like, 78; Bothwell like, 98; Doune compared with, 422; drawbridge, 547.
Coxton Tower, staircase, 140.
Craig Castle, passage like Gight Castle, 323; description, 326.
Craighall compared to Struthers Castle, 354.
Craigmillar Castle, fireplaces removed, 108; attic on battlements, 152; description, 189;

walls of enceinte, 203; corbels and machicolations, 207; converted into courtyard plan, 223; example of hoardings, 225; fireplaces, 308; parapet corbels left, 311; barrel vault, 315; stone roof, 331, 414; parapet without corbels, 407; enclosing wall, 483.
Craigneil Castle, description, 297.
Craignethan Castle, imitation corbels, 225; description, 255; sloping gun-holes, 542.
Craill Castle, 63.
Crichton Castle, description, 209; machicolations, 224; carving, 225; balcony, 459.
Crookston Castle, exceptional design, 225, 523; passages in walls, 317; deep external bay of windows, 470; description of, 533; compared with Morton Castle, 550.

Dalswinton Castle, 64.
Darnaway Castle, description of, 304.
Dean Castle, additions detached from keep, 226, 359; minstrels' gallery, 231; description, 401.
Dirleton Castle, resembles style of the South, 64; description, 113, 114, 435; chimney, 121; towers demolished, 129; old towers utilised, 169; courtyard plan, 222; timber roof destroyed, 306; guard-room and dungeon under the private room, 320; window to cellars, as at Linlithgow, 487; external work like Hermitage, 527.
Donibristle Castle, beacon light, 330.
Doune Castle, fireplace removed, 108; plan corresponds with Crichton Castle, 214; hall roof of Crichton similar, 215; built on courtyard plan, 222, 417; hall fireplace double, 225; open timber roof gone, 306; oratory, 406; outside stair to hall, 407; description, 418; belonged to Duke of Albany, 429; enclosing wall, 483; large keep, 523; external work like Hermitage, 527; extended buildings, 528; oratory, 571; musicians' gallery, 404.
Dover Castle described, 5, 18; subterranean passages at, 112, 121.
Draffane, 259. *See* Craignethan.
Drochil Castle, compared with Balveny, 390; mouldings like those of Aberdour and Edinburgh Castles, 454.
Drum Castle, Aberdeenshire, description, 150; rounded angles like Neidpath, 188.
Drummond Castle, description, 285.
Drury, Sir William, Report on Edinburgh Castle, 450.
Dryden, Sir Henry, Bart., 522.
Duc, Viollet-le-, descriptions of French architecture, 2; description of Beaugency, 8; restoration of Château d'Etampes, 25; machicolations invented by Richard I., 25; description of Provins, 27; description of Château de Coucy, 38; restoration of Château de Pierrefonds, 46.
Duffus Castle, early stronghold, 63; description, 278.
Dumbarton Castle, early stronghold, 63.
Dunbar, early stronghold, 64.
Dunblane, fireplaces removed, 108.
Dundas Castle, description, 328.
Dundonald Castle, compared with Rothesay, 82; fireplaces, 121;

description, 167; Torthorwald compared with, 175; a simple keep, 221; Crookston Castle compared with, 534.
Dunfermline, beacon lights, 330; church, 464.
—— Palace, courtyard plan, 417; description of, 514.
Dunnottar Castle, corbels and machicolations, 224, 443; description, 562.
Dunolly Castle, description, 281.
Dunskaith Castle, ancient fortress, 63.
Dunstaffnage Castle, compared with French and English examples, 33; thirteenth century, 63; rocky site, 64; description, 85; description of chapel, 90; plan irregular, 127; loopholes as at Caerlaverock, 129; traditional date, 283.
Durham Castle, a shell keep, 22.
Dury, Abbot, arms at Dunfermline, 516.

Early English Castles, 42, 43.
Edinburgh Castle, an ancient fortress, 64; courtyard plan, 222, 417; timber roofs, 306; gabled crowsteps, 328, 505; description, 445; one of the four chief fortresses, 464; extended accommodation, 478; watch-turrets, 467; Renaissance corbels like work at Falkland, 506.
—— Parliament House, 460.
—— Tron Church, 306.
Edindour Castle, ancient fortress, 63.
"Edom o' Gordon," 337.
Edwardian Castles, 42, 43, 64, 112, 129, 447.
Edzell Castle, corbels applied as ornaments, 225, 259, 297; small break at staircase, 295; description, 359.
Elgin Cathedral, rebuilding of, 444.
Elphinstone Castle, description, 233; compared with Comlongan, 237, 240; compared with Cardoness, 244; spy-hole, 251; roof of, 326.
Étampes, Château d', 24, 25.

Falkland Palace, courtyard plan, 417; gateway compared with Stirling Castle, 472; extended accommodation, 478, 479; corridors added, 497; medallions, 500; description, 501; compared with Dunfermline Palace, 516.
Falside Castle, keep enlarged into a mansion, 359; description, 409.
Farme Castle, description, 313.
Farnell Castle, gabled crow-steps, 328.
Federate Castle, description, 357.
Fordel Castle, beacon light, 330.
Forfar Castle, ancient fortress, 63.
Fraserburgh, Castle at Kinnaird Head, and Wine Tower, built by Sir A. Fraser of Cairnbulg, 313.
Fyvie, ancient stronghold, 63.

Gaillard, Château, description, 25, 26; "bec" or keel of the keep, 37; Rosslyn Castle compared with, 376.
Gight, or Formantine, description, 322; passage like that of Craig Castle, 327.
Gisors Castle, description, 21, 22.
Glamis, ancient stronghold, 63; corbels of old parapet left, 311; Glamis Castle and Castle Huntly both altered by Earl of Strathmore, 322.

Gloume Castle, 202. *See* Castle Campbell.
Grose, Captain, 407, 467, 470.
Guildford Castle, herring-bone work, 12.
Gylem Castle, fireplace like Cardoness, 246.

Hailes Castle, 113; description, 122.
Haining Castle, description, 413.
Hallbar Castle, staircase, 140.
Hallforest Castle, description, 157.
Harlech Castle, 42.
Hay, Father, 370.
Heriot's Hospital, style of, 460, 497.
Hermitage Castle, exceptional style of, 225, 523; description, 523; similar to Crookston Castle, 534, 550.
Holyrood Palace, courtyard plan, 222, 479; similar to Falkland Palace, 472.
Huntingtower. *See* Ruthven.
Huntly Castle, resemblance to Balveny, 390.
Hurstmonceaux Castle, 57, 58.

Innes, Cosmo, list of Early Scottish Strongholds by, 63; date of Yester Castle, 116.
Inverkip Castle, description, 296.
Inverlochy Castle, ancient fortress, 63; site of, 64; description, 73.
Inverurie, ancient fortress, 63.

Jedburgh, ancient fortress, 64.

Keeps, enlarged into castles surrounding courtyard, 188, 359; French, 6, 7; Norman, 4, 5, 7, 22, 30, 39, 59, 62, 144; rectangular, 21; Scottish, 30, 34; shell, 21.
Kilbirnie, Place of, description, 390.
Kilchurn Castle, description, 382.
Kildrummie Castle, ancient fortress, 63; resembles Southern work, 64, 65; completed work of First Period, 92; description, 108; exceptional building, 418.
Kilkerran Castle, description, 298.
Kilravock Castle, description, 384.
Kincardine Castle, primitive fortress, 63.
Kinclaven Castle, site of, 64; description, 67; Lochmaben Castle similar to, 79; simple form of plan, 92; square on plan, 127; resembles Tarbert, 136; Balveny Castle resembles, 386.
Kinnaird Castle, description, 270.
Kirkwall, Bishop's Palace, description, 519.
—— Castle, exchanged for Ravenscraig Castle, 545.

Lamberton, primitive fortress, 64.
Leuchars, primitive fortress, 63.
Leven Castle, ornamental corbels, 225; description, 295.
Liberton Tower, parapet at, 224; spy-hole at, 251; description, 226.
Lincluden Abbey, built by the third Earl of Douglas (Archibald the Grim), 106.
Lincoln, Jew's house at, 23.
Linlithgow, primitive fortress, 64.
—— Palace, courtyard plan, 222, 417; triple fireplace at, 225; stone bench in hall, 404; window to cellars, 438; hall similar to other Royal palaces, 457; oriel window at, 459; deep external bay of windows, 470; towers resemble those of Stirling, 473; fireplaces like those at Stirling Palace, 475; description, 478; compared with Dunfermline

Palace and Falkland Palace, 504, 516.
Linlithgow, Knights Hospitallers, fireplace like that of the Palace, 490; roof, 306; description, 508.
Loch-an-Eilan, description, 72, 73.
Loches, Château de, keel on towers, 31; James v. imitates at Stirling, 476.
—— Keep, description of, 9.
Lochindorb Castle, primitive fortress, 63; chapel at, 64; enlarged by Edward i., 65; description, 70.
Lochleven Castle, description, 146.
Lochmaben Castle, primitive fortress, 64; description, 78; special site of, 143.
London, City, houses of, 23.
—— Tower of, 5.
Louvre, donjon of, 53.
Lübeck, Rath-haus of, 219.

Maitland's *History of Edinburgh*, 452, 460.
Mearns Tower, description, 230; musicians' gallery at, 404.
Montsabert, Château de, 53, 54, 55.
Moray House, panelled ceilings, 301.
Morton Castle, primitive fortress, 64; exceptional design, 226, 523; description, 545; plan similar to Tullyallan, Rait, etc., 554, 557, 558.

Neidpath Castle, resembles Drum Castle, 155; description, 183.
Newcastle, keep at, 5, 13.
Newark Castle (Selkirkshire), description, 247; parapet roofed in, 284.
Niddrie Castle, description, 324; deep external bay of windows, 470.

Oakham Castle, hall of, 23.

Paisley Abbey, vaulting of, 173.
Paris, House of Francis i., 56, 507.
Parker, J. H., *Domestic Architecture of England*, 2, 23, 43, 49, 59, 497.
Period, First, 61.
—— Second, 143.
—— Third, 222; simple keeps, 226; keeps with one or two wings, 314; keeps enlarged by additions, 359; castles designed as buildings surrounding a court-yard, 417; exceptional modification of keep plan, 523.
Pevensey Castle, Roman work at, 5, 11, 42; similar to French and Scottish castles, 33; Inverlochy Castle resembles, 78.
Pierrefonds, Château de, description, 44, 45, 46, 47; compared with Warwick Castle, 49; towers of Craigmillar resemble, 197; contemporary with keeps of Scotland, 220; Scottish keeps of Third Period resemble, 223; keep of Doune Castle resembles, 422.
Porchester Castle, Roman work at, 5, 11.
Pratt, Dr., *Guide to Buchan*, 357.
Preston Tower, hoardings at, 225; description, 317.
Provins, Château de, description, 27, 28.

Rait Castle, windows of Duffus similar to, 280; exceptional plan, 523; entrance door similar to Morton Castle, 548; classed with Morton and Tullyallan Castles, 549, 554, 557; description, 558.
Ramage, Dr. C. T., *Drumlanrig Castle and the Douglases*, 550.

Ravenscraig Castle, exceptional design, 226, 523; description, 538.
Redcastle, primitive fortress, 63; description, 280.
Renaissance style, 52, 53, 60, 131, 133, 182, 219, 322, 332, 470, 475, 483, 495, 505, 507, 516.
Riviera, Castles in the, 20.
Robertson, Dr. Joseph, 492, 495.
Roche Guyon, Château de, remarkable site and subterranean passages of, 36, 121.
Rochester Castle, central wall, 7, 14; description, 15; enceinte, 22.
Roman work in Gaul and England, 2, 3, 11, 12, 21, 42.
Rosslyn Castle, description, 366.
Rosyth Castle, description, 289.
Rothesay Castle, primitive fortress, 63; oval plan, 64, 127; description, 80; keep similar to Dundonald, 221.
Rouen, Tower of Jeanne d'Arc, 39, 40.
Roxburgh Castle, primitive fortress, 64; one of the four principal fortresses, 464.
Ruthven Castle, in Badenoch, primitive fortress, 63.
—— —— (Perthshire), roof on parapet, 225; additions detached from keep, 226, 359; fireplace, 308; description, 395.

Sanquhar Castle, description, 415.
Sauchie Tower, Old, wash-hand basin at, 182; description, 265.
Saxons, wooden buildings of, 21, 24.
Scottish castles, early, resemblance to French and English castles, 21, 33.
Scott, Sir Walter, *Marmion*, 119; "Tillietudlem," 255.
Sibbald, Sir Robert, description of Struthers Castle, 355.
Slezer, view of Bothwell Castle, 104; view of Stirling Castle, 467, 470.
Somerton Castle, 43.
Southampton, 23.
Spynie, Bishop's Palace, corbels, etc., 224; description, 439.
St. André, Château de, 33, 34, 35; resemblance to Dunstaffnage Castle, 92.
St. Andrews, primitive fortress, 63.
—— Cathedral, unroofed by Edward I., 464.
—— Castle, corridor at, 470.
St. Giles', Edinburgh, vaulting of, 173.
St. Margaret's Chapel, Edinburgh Castle, 460.
Stirling Castle, primitive fortress, 64; courtyard plan, 222, 417; open timber roof, 306; description, 464; work resembles that of Linlithgow Palace, 494, 495. 500; work resembles that of Falkland Palace, 504.
——Grey Friars' Church, buttresses of, 354.
—— Argyll's Lodging, porch of, 393.
Stobhall, porch at, 392.
Stokesay Castle, 43.
Stoneypath Tower, description of, 355.
Strathbolgie, primitive fortress, 63.
Struthers Castle, description, 353; exchanged for Dunnottar Castle, 564.

Tantallon Castle, like Crichton, Doune, etc., 214; courtyard plan, 222, 417; parapet with continuous corbel table, 225;

open timber roof at, 306; work at Hermitage Castle resembles, 527: description, 429; enlarged keep, 523.
Tarbert Castle, site, 64; early fortress, 65; description, 136; exceptional, 143.
Tattershall Castle, 59.
Threave Castle, description, 157; cannons used at, 435, 463; round towers on enceinte, 483.
"Tillietudlem Castle," 255.
Torphichen Church, 514.
Torthorwald Castle, description, 175.
Tullyallan Castle, fireplace at, 121; exceptional design, 226, 523; description, 550; resembles Morton Castle, 548, and Rait Castle, 558.
Turnberry Castle, primitive fortress, 64.
Tytler, P. F., historian, 303.

Urquhart, primitive fortress, 63.

Villeneuve-lez-Avignon, 121.
—— Tour du Pont, like Scottish keeps, 33, 36.
Visigoths, style of building, 2.

Warwick Castle, 24, 48, 49; towers at Craigmillar compared to, 197.
Whittingham Castle, description, 300.
Wilson, Professor Daniel, 461.
Windsor Castle, 22; underground passages at, 121.
Winton House, plaster ceilings at, 301.

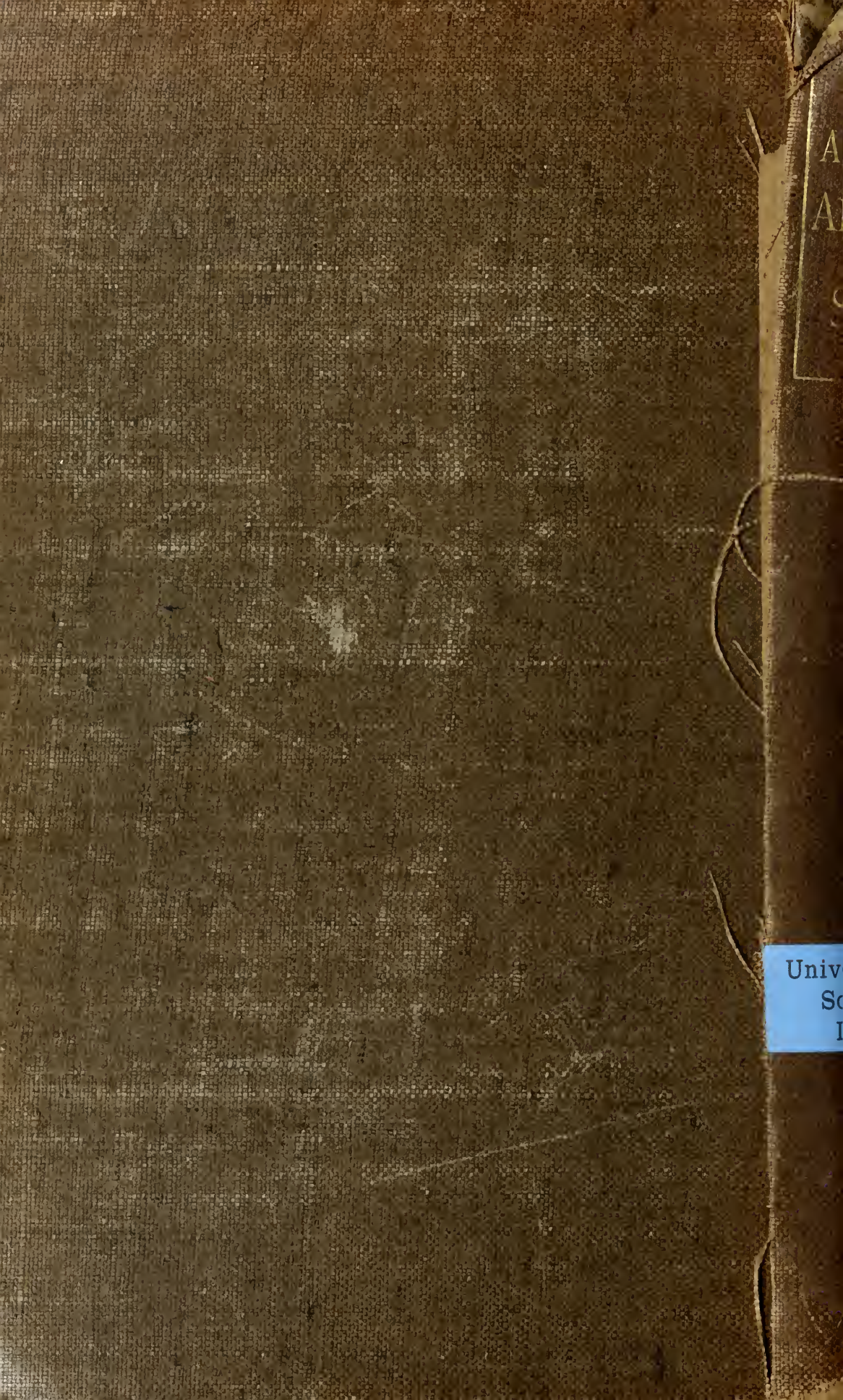
Yester Castle, primitive fortress, 64; subterranean passages at, 112; description, 116; fireplaces, 171; wall as at Morton Castle, 547.
York Castle, 24.

END OF VOLUME I.

Edinburgh University Press:
T. and A. CONSTABLE, Printers to Her Majesty.

University of California
SOUTHERN REGIONAL LIBRARY FACILITY
405 Hilgard Avenue, Los Angeles, CA 90024-1388
Return this material to the library
from which it was borrowed.

REC'D URL CIRC
ORION
LD/URL OCT 18 83
OCT 19 1983

UCLA-Art Library
* NA 972 M17c v.1
L 006 251 570 5

UC SOUTHERN REGIONAL LIBRARY FACILITY
D 000 580 641 9